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ABSTRACT

Instituted by the Migrant Section, Florida State Department of Education for the 1970-71 school year, the Migrant Compensatory Learn and Earn Program operatived 30 mobile units (2 on elementary, 4 on high school, and 24 on junior high school campuses) which housed 4 pre-vocational programs (Hospital, Housekeeping, Auto Tune-up, and Supermarket) on 21 school campuses in 5 Florida counties: Broward, Hillsborough, Orange, Palm Beach, and Polk. For evaluative purposes, pre- and post-test data were collected on this sample of 441 participating students using various instruments, checklists, surveys, and work sample tests ranging from the Peabody Picture Vocabulary Test to teachers' weekly reports. Evaluation revealed that the experimental group generally showed no significant advantage over the control group (n=353) in terms of reading comprehension, arithmetic-computation ability, and self-esteem; however, significant positive findings for the experimental group were indicated in the students' participatory ability in conducting oral job interviews and completing job application forms; in 11 of 14 areas of on-the-job work functions; in attendance; and in personal appearance, behavior, relationship to peers, and punctuality. Included in the document are 13 recommendations, 17 tables, and 17 appendixes showing and describing the program and evaluative instrumentation used. (MJB)

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Research Reports

FLORIDA COMPENSATORY MIGRANT "LEARN AND EARN" PROGRAM: AN EVALUATION

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FLORIDA COMPENSATORY MIGRANT "LEARN AND EARN" PROGRAM: AN EVALUATION

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* * * * * * * * * * *

The evaluation and analysis of data reported herein were conducted under Letter of Agreement by and between the Division of Elementary and Secondary Education of the Department of Education of the State of Florida, and the Division of Universities of the Department of Education of the State of Florida.

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* * * * * * * * * *

University of Florida
Gainesville, Florida 32601

August, 1971

FOREWORD

Migrant children have a myriad of opportunities to observe a very limited aspect of the world of work, but perhaps no other group of children in America is more positively affected by direct experience within the world of work. The nature of their parents' work continually emphasizes to the children the importance of work. However, because this work is of such a narrow occupational nature, programs were developed to allow these children to be able to select from a wider spectrum of work opportunitites.

Gratitude is extended to Mr. Floyd T. Christian, Commissioner of Education of the State of Florida, and to the several State and Federal agencies which provided financial support to develop and operate the Learn and Earn program and to compile this evaluation report. The services rendered by the administrative officers who formulated the necessary agreements and oversaw the administrative responsibilities for this project are sincerely appreciated.

A special word of appreciation is extended to Dr. Ira J. Gordon, Director, Institute for the Development of Human Resources, University of Florida, for his guidance and expertise in formulating the initial proposal and participating in the pre-planning. This evaluation project is but one of several programs functioning under the auspices of the Institute. Appreciation is also extended to several of the Institute members for their comments and suggestions during the project year.

While many people have participated in the evaluation project, either directly or indirectly, the director and project staff were solely responsible for its operation and for the content of this report.

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CODE FOR COUNTIES

A - Broward

B - Hillsborough

C - Orange

D - Palm Beach

E - Polk

CHAPTER I

LEARN AND EARN PROGRAM

Introduction

The Migrant Compensatory Learn and Earn Program was instituted by the Migrant Section, Florida State Department of Education, in cooperation with five Florida counties, to be operated during the 1970-71 school year. During the summer of 1970 various meetings were held statewide, involving people from several phases of compensatory education, for planning and organizing the program. The Institute for the Development of Human Resources, University of Florida, was asked to submit a proposal for evaluation of the program. The evaluation project grant was approved and let in August, 1970. This report conveys pertinent aspects of the program curricula, the research design for the evaluation, instrumentation and data analysis, and the summary and recommendations.

Problem

The purpose of this project was the evaluation of the Learn and Earn Program, as instituted by the Migrant Section, State Department of Education, in the Florida counties of Broward, Hillsborough, Orange, Palm Beach, and Polk. Thirty mobile units housing four pre-vocational programs were set up on twenty-one school campuses across these five counties. Most of the school campuses, as shown in Appendix A, were junior high schools. However, four units were placed on high school campuses and two units on elementary school campuses.

Twenty mobile units housed the auto tune-up and the supermarket-cashiering programs. The remaining ten units contained the hospital-housekeeping program.

Objectives

The objectives of the Florida Learn and Earn program were developed on the basis that the migrant child is reared in a present-oriented culture and should experience learning activities that are relevant to him and his community. For this reason, the program was designed to:

(1) help each child experience success and improve a much damaged self concept by achieving success in a short-term occupational training course.

(2) individualize learning to allow each child to proceed at his own rate of learning.

(3) motivate these children toward greater participation in other areas of the curriculum.

(4) make available opportunities to participate in real experiences to increase their awareness of the world and equip them for a changing world.

(5) provide a laboratory that will develop positive attitudes toward work, personality skills, and an ability to follow directions and to get along with others.

(6) help each child to be aware of his potential through continuous evaluation and feed-back.

Program and Curricula

The mobile units were exquisitely designed and with minor exceptions, very functional. Each unit was well lighted and air-conditioned, with the ten hospital-housekeeping units having their own bathroom facilities. The units provided an excellent environment for learning, in terms of physical layout, aesthetics, and teaching

materials.

Late arrival and delay in setting up some of the units caused several programs to be of short duration. As shown in Table 1, programs varied in length from twelve to thirty-four weeks. The programs at Ocoee and Apopka operated on two one-semester sequences, thus creating the twelve-week sessions. The programs in Broward and Palm Beach counties were most affected by the setting up delay and operated approximately fifty percent of the time that programs were in operation in the other counties.

The Learn and Earn program was designed to operate in conjunction with the local school, local educational agency, and community businesses. Each of the five counties involved in the Learn and Earn program had a county coordinator for this program. The county coordinator worked closely with teachers, local school administration, and business and industry in the community. Each mobile unit had one teacher and two assistants. All personnel were selected by the county in which the mobile unit was located. The teachers were certified by the State of Florida and the assistants were selected according to their experience in the occupational areas in which they were to work. In many cases, and for various reasons, the counties could not find individuals with training and experience directly related to the type of training to be offered in a particular mobile unit. Workshops were conducted by the State Learn and Earn staff to assist the teachers and aides in understanding the program purposes and the equipment and materials which would be used in the mobile classrooms.

TABLE I

STUDENT PARTICIPATION IN LEARN AND EARN PROGRAM

School (1)	County (2)	Trailer (3)	No. of weeks L & E program in session (4)	No. of students served (5)	No. of males (6)	No. of females (7)	No. of students employed (8)
Attucks	Broward	Auto Branham-Super	18	18	10	8	0
Deerfield Beach	Broward	Carson-Hosp.	19	30	7	23	24
Deerfield Beach	Broward	Auto Clampett-Super	19	29	25	4	9
Everglades	Broward	Auto Marshall-Super	18	29	12	17	13
Margate	Broward	Auto Hankerson-Super	14	24	14	10	0
Pompano	Broward	Auto Cooper-Super	16	41	21	20	10
Rickards	Broward	Auto Wright-Super	20	15	6	9	6
Rickards	Broward	Levay-Hosp.	14	25	12	13	18
East Bay	Hillsborough	Auto Brown-Super	25	21	10	11	13
East Bay	Hillsborough	Auto Hughes-Super	24	26	15	11	15
Marshall	Hillsborough	Auto Collins-Super	26	14	10	4	14
Marshall	Hillsborough	Auto Brown-Super	26	20	16	4	20
Orange Grove	Hillsborough	Morales-Hosp.	27	30	18	12	21
Tomlin	Hillsborough	Scott-Hosp.	25	31	11	20	30
Apopka	1st Orange-sem.	Oliver-Hosp.	12	20	11	9	20
Apopka	2nd Orange-sem.	Oliver-Hosp.	16	13	5	8	13

TABLE I (continued)

STUDENT PARTICIPATION IN LEARN AND EARN PROGRAM

School (1)	County (2)	Trailer (3)	No. of weeks L & E program in session (4)	No. of students served (5)	No. of males (6)	No. of females (7)	No. of students employed (8)
Carver	Orange	Auto Hogan-Super	30	30	14	16	14
Lakeview	Orange	Williamson-Hosp.	29	30	12	18	17
Ocoee	1st. Orange-sem.	Auto Schanbacher-Super	12	18	7	11	13
Ocoee	2nd Orange-sem.	Auto Schanbacher-Super	16	16	8	8	4
Belle Glade	Palm Beach	Auto Jackson-Super	15	17	10	7	10
Belle Glade	Palm Beach	Auto Kelly-Super	17	13	9	4	12
Belle Glade	Palm Beach	Crosbie-Hosp.	17	10	2	8	9
Hagen Road	Palm Beach	Binns-Hosp.	20	15	0	15	2
Hagen Road	Palm Beach	Auto Dupont-Super	19	15	15	0	1
Pahokee	Palm Beach	Auto Farmer-Super	15	15	10	5	9
Dennison	Polk	Auto Rizer-Super	34	17	10	7	17
Haines City	Polk	Herring-Hosp.	24	16	7	9	15
Haines City	Polk	Auto Dobruck-Super	26	13	10	3	12
Lakeland	Polk	Auto McCaskill-Super	26	16	14	2	16
Lakeland	Polk	Malloy-Hosp.	27	14	2	12	14
Lake Wales	Polk	Auto Smith-Super	30	20	12	8	19

Some of the teachers indicated they received full cooperation from their local school officials; that is, the Learn and Earn program was considered an integral part of the school program and all the materials and assistance available to the rest of the school program were afforded to the students and teacher in the mobile unit. Some teachers, however, indicated that their mobile unit was "set apart" from the rest of the school; that is, they were not allowed to use library materials, audio-visual materials, etc. which were available in the participating school.

The teachers, participating school principals, and the individual county coordinators made the decisions concerning the number of students for each mobile unit, the number of hours of each school day the students would spend in the mobile units, and the number of weeks a child would remain in the program.

Students for the program were selected by the teacher, the school principal, and school guidance personnel, with some direction for selection being given by the county coordinator. As far as practicable, migrant students were selected using the following criteria:

(a) occupation of parents (migrant status)

(b) projected benefit of program to child

(c) desire of students to participate

All of the students in the program did not fit the one-year definition of a migrant child; i.e., "a child whose parents crossed the county or state line within the last year in pursuit of agricultural employment." In some cases the definition of migrant was extended to a five-year definition; i.e., services may be extended to

"children of parents who crossed the county or state line within the last five years in pursuit of agricultural employment." A few students did not fit either of these definitions of a migrant child.

In some schools children who had been classified as "low ability" or "children with special problems" were selected to participate in Learn and Earn, some schools selected students randomly, and in a few schools students were selected who were classified as "high ability students."

Attempts were made to find employment for the students in the local community, in positions which would be related to the instruction given in the mobile unit. Many difficulties arose in this endeavor. The Florida child labor laws had to be complied with, and in some cases the children were too young to be placed on a job. The number of students in each program who were employed is shown in Table I. They were paid $1.60 per hour from the state migrant education fund.

A list of the equipment and materials which were ordered for the mobile units is found in Appendix B. In many of the units not all of the equipment and materials arrived until after classes had started. In some cases the equipment did not operate properly.

During the course of the program, the housekeeping phase of the hospital-housekeeping unit was deemphasized in some mobile units and greater emphasis was placed on the patient-care phase of instruction. The Learn and Earn program, therefore, is described herewith in only three occupational areas: Hospital-housekeeping, Auto Tune-up, and Supermarket.

Hospital-Housekeeping Program

The hospital-housekeeping program was designed to serve those students who had an interest in hospital-patient care and housekeeping work. Teachers in several mobile units deemphasized the housekeeping phase of the program during the year, some even to the extent of not teaching that program and replacing it with such programs as sewing skills, introduction to typewriting, and life-saving techniques.

One end of the mobile unit was designed as a simulated hospital room with a standard hospital bed and tray table. At the other end of the mobile unit was a simulated motel or hotel room with a standard double bed, chest of drawers, and a bathroom. Sheets, towels, carts, luggage racks, trays, etc. were supplied for these units. A complete list of the equipment and materials which were supplied is given in Appendix C. A storage space for a vacuum cleaner, a floor machine, and other supplies was provided in the general work area in the center of the mobile unit. A washing machine, dryer and sewing machine were also standard equipment in the units.

Some of the ordered supplies never arrived at the mobile units. In some units the teachers and aides had to improvise or in some way acquire needed supplies such as thermometers, sheets, pillow cases, etc.

Reading and math skills were taught in conjunction with the occupational learning in each of the three parts of the Learn and Earn program. The McGraw-Hill programmed reading and math series, because of arriving late in the year were not used in all units. A list of the

teaching materials furnished in each unit is found in Appendix D.

The teaching content was quite extensive in the hospital-housekeeping program. The following list gives some of the topics covered:

(1) making a bed

(2) bathing a patient

(3) reading a thermometer

(4) taking pulse, respiration, and temperature

(5) weighing a patient

(6) cleaning and preparing motel room after check-out

(7) bringing in and setting up food trays

(8) following rules of cleanliness

(9) filling water pitchers and arranging flowers

(10) helping move patients

(11) giving back rubs

(12) restraining patients

(13) giving enemas and douches

(14) collecting specimens

(15) measuring and recording input and output

(16) using hot and cold packs

(17) using proper kitchen procedures

(18) attending nurse's station - call lights, etc.

(19) learning safety procedures

(20) learning first-aid procedures

(21) learning pre- and post-operative care

(22) learning simple hospital terminology -- "stat", "CSR", etc.

(23) cleaning the patient unit

(24) discharging and transferring a patient

(25) cleaning motel unit

(26) checking for needed repairs and replacements

(27) checking soiled linens in and checking out clean linen -- making proper reports

The degree to which these and other subjects were taught in the mobile units depended in large measure on the knowledge and experience of the teachers and assistants in the units. In some units, where the teacher or an aide had actual experience as a nurse or nurses aide, the students acquired real expertise in the jobs mentioned above. In some cases they moved beyond these tasks to such tasks as giving intravenous feedings.

The number of boys in the hospital and patient care units was somewhat surprising. However the teachers indicated that these students enjoyed working in the units and gained profitable experience.

Learning experiences related to hygiene, personal health care, and sexual behavior were also considered in the curriculum. Outside resource people, such as county health nurses, school nurses, and Red Cross personnel were used. Wherever possible, students were employed in related work in hospitals, nursing homes, motels, and day-care centers. Several of the units served as an infirmary for the school when simple bandage changes or other simple treatment was required. This type of "real" experience was valuable and relevant to the students.

Auto Tune-up Program

The following description is restricted to the aspects of instruction that were unique to the Auto Tune-up Program and does not include the basic educational aspects of the program. Reading and math as described earlier, were taught in cooperation with each program. Employability skills, such as completing job application forms, interviewing for a job, grooming, dress, courtesy, punctuality, and many other instructional objectives were taught as a combined unit and were not unique to the Auto Tune-up Program. This description is not an attempt to describe any single Auto Tune-up Program; rather it is a composite of those most frequently reported teaching areas and methods utilized in the twenty Auto Tune-up Programs.

The Auto Tune-up Program was designed to interest students with an aptitude or interest in automotive mechanics. Job performances that might be handled by beginning employees in auto tune-up mechanics were the primary operations and knowledge considered in this program. Teaching resources consisted primarily of reference materials, simulated electrical system demonstration boards, some hand tools, and electrical testing equipment. A list of tools and other teaching resources for the Auto Tune-up Program is contained in Appendix B. Most Auto Tune-up instructors found it necessary to secure and use tools and teaching materials in additon to those provided in the mobile units. Some instructors provided their personal sets of tools, and in other cases additional tools were borrowed from other automotive programs within the school system. Most instructors secured used engine parts upon which their students could perform actual operations. Additionally,

several instructors designed and constructed demonstration boards and apparatuses on which they could demonstrate the function, operation, maintenance, and adjustment of various automotive systems. Tools and teaching resources were primarily oriented to the ignition system of the automotive engine. Course outlines and reference materials concerned the total electrical system, the exhaust system, and the fuel system.

Reference materials consisted primarily of the reading materials concerning automotive operation, maintenance, and tune-up procedures in a program packet called "Learning With The Pros." Due to the limited reading ability of many students, few instructors utilized this total series. Several instructors found it necessary to develop their own teaching and reference materials for students.

In general, the course content consisted of the following:

(1) Describing the circuits of the ignition system - naming the components and describing their function, removing and replacing components of the ignition system, maintaining and adjusting components of the ignition system.

(2) Describing the cranking system - identifying components and removing and replacing components of the cranking system.

(3) Describing and naming components of the lighting system.

(4) Describing and naming components of the fuel-air system.

(5) Using hand tools to disassemble, inspect, and assemble various parts of the automotive engine.

(6) Using volt meters, ammeters, dwell meters, and scope to check the ignition system.

(7) Disassembling one-cylinder engines - cleaning, inspecting, replacing worn parts, reassembling and adjusting.

Not all instructors included all of these facets in their instructional program. In a few Auto Tune-up Programs many other aspects of automotive adjustment and repair were presented. In most cases the range and depth of instruction were determined by the accessibility of automobiles and/or automotive parts that could be used for teaching.

Some instructors utilized small, one-cylinder, gasoline engines in this program to allow students the opportunity to repair and clean them. These experiences were often forerunners of the actual work on automobile engines.

The type of instruction conducted and the type of teaching resources utilized varied greatly, due to the varying understandings of instructors concerning child labor laws, hazardous occupation regulations, and educational exemptions. Most instructors placed students in actual work experience in local garages, service stations, etc. in the community.

In most mobile units, the following sequence of instruction was utilized: Instructors demonstrated and described automotive systems, utilizing the simulated systems boards. Students were then exposed to various types of reading materials about the systems. Students were then given the opportunity to obtain hands-on experiences, using hand tools, making adjustments, and removing and replacing components of the systems. Students were given an opportunity to obtain hands-on experiences by making adjustments, removing and replacing components, and

disassembling and assembling various parts of used automotive engines and accessories. In many instances students were then allowed to use the Sun 920 system on a performing engine. In most mobile units from two-thirds to three-fourths of the time was spent studying automotive tune-up which provided students with actual hands-on experiences.

Supermarket Program

Twenty of the mobile units in the Learn and Earn Program had instructional facilities and materials in the area of supermarket operations. The object of this program was not development of a high-level skill or competency in the operation of a supermarket. Rather, the aim was to introduce interested migrant students to the supermarket as a possible cluster of vocational opportunities. There was some limited expectation regarding development of work competencies appropriate for the supermarket. Also, there was anticipation that efforts would be made to place students in part-time work situations in actual supermarkets. A total of 240 students participated at some time during the year in this instructional program.

Three basic work station areas of the supermarket were included in the instructional program. Those were cashiering, bagging, and stocking shelves. In addition, most programs included some instruction pertaining to supermarket operation generally. For example, the role of the modern day supermarket was studied in instructional programs.

The basic instructional material provided in each mobile unit for instruction in supermarket operations was the National Cash Register Educational Series. In a few instances, as a substitute, other instructional materials were used. The book, Introduction to Supermarket

Operations, published by Delmar Publisher Incorporated, was one of the additional instructional materials.

Instructional personnel in the mobile units with the supermarket program were given assistance in using the National Cash Register Educational Series in two workshops held during the year.

The students' instructional materials for the supermarket area were available in sufficient quantity but the National Cash Register Company did not provide teachers in the mobile units with the necessary teacher's manuals. The reasons given by the company was that the instructional personnel in the mobile units had not received the eighty clock hours of instruction required of instructors using these materials. This restriction by the National Cash Register Company encouraged, and in some respects demanded competence on the part of instructors using their materials, but students in the mobile units were handicapped because their teachers did not have access to the instructor's manuals.

Specifically, students studying supermarket operations had three categories of job operations with which to be concerned-cashiering, bagging, and stocking shelves. The three instructional booklets in the National Cash Register Educational Series used in teaching the cashiering responsibilities were Supermarket Checker Education - Departmental Registration, Programmed Instruction - Position Amount Control, Supermarket Checker Education - Student's Manual, and Programmed Instruction - Cashing Checks. In addition, as interpreted by some instructors, Programmed Instruction - How to Weigh Produce, was used in teaching cashiers. Several teachers used

supplementary materials which they devised themselves or which they located through local supermarkets.

The work of bagging was taught primarily through the use of National Cash Register's booklet, Programmed Instruction - Proper Bagging in a Grocery Store. Stock shelving operations were taught with National Cash Register's Programmed Instruction - Proper Price-Marking in a Food Store - as text material. All students studying the supermarket operation received instructions in all three areas of work - cashiering, bagging, and stock shelving. In addition, approximately 90 percent of the students studying supermarket operations had an opportunity to work part time in a local supermarket or grocery store.

The mobile unit was equipped with a check-out counter including a NCR cash register as well as an electrically operated counter top to move the groceries toward the cash register. In addition, a small closet at one end of the mobile unit was used for storage of "groceries" and other items used in the instructional program. Also, along the sides of the mobile unit there were built-in shelves for display of items found in supermarkets.

One of the early challenges faced by instructors in the supermarket area was how to provide "groceries" with which to stock shelves. This problem was solved for the most part by teachers requesting unfilled cartons from companies which normally supply supermarkets with goods. These cartons however, were unlike real items primarily in that empty cartons, cans, etc. were too light in weight. This caused some difficulty in the shelving of these items because they would not stand up or stack on the shelves as the weighted items would. Finally,

these simulated groceries might not have received the same degree of care by the "employees' as the real items would have received. For example, the "eggs" in the empty egg carton never did break, even with rough handling. These dummy groceries also presented special problems in the bagging process because the cartons simply did not have the "feel" of the real item.

Because of the limited space in the mobile unit, stock shelving was not as extensively done as in a retail supermarket, but simulation of pricing and displaying was possible.

CHAPTER II

Research Design and Instrumentation

A variety of instruments, checklists, and evaluation forms used in the evaluation of the Learn and Earn Project. The basic research design employed was the Pretest-Posttest Control Group Design.[1] Attendance records provided by the instructors in the mobile units showed a total of 661 students participated in the program at some time during the year. However, only those students who were present during the third or fourth week of their respective term in the program were administered pretests, and of this group, only those who remained in the program through the month of May, 1971 were administered posttests. Pre- and post-data were collected on this sample of 441 students from the Learn and Earn program.

From each of the respective schools where mobile units were located, a random sample of control students were chosen. A control students was defined as one who qualified under the existing definition of a migrant child, was approximately of the same age and grade level, and was enrolled in the regular school curriculum offered by the participating school. The control group consisted of an (n) of 353 students from twenty one schools.

Three standardized test instruments, the Peabody Picture Vocabulary Test (PPVT), Stanley Coopersmith Self-Esteem Inventory (SEI) - Short Form, and the Adult Basic Learning Exam (ABLE), were utilized within the research

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[1] Campbell, D. T. and J. C. Stanley. Experimental and Quasi-Experimental Design for Research. Rand McNally and Co., Chicago, Illinois 1963 pp. 13-24.

design. The PPVT was administered to those experimental and control students identified previously. The PPVT was administered on a group basis, rather than individually as is normally done. Transparencies of the PPVT plates were made and shown on an overhead projector. As the tester gave the appropriate vocabulary word, the students indicated their responses on an answer sheet prepared for this form of testing. (See Appendix E)

The SEI was also administered to experimental and control subjects as described above. This instrument was modified slightly in that the column headings "Like me" and "Unlike me" were changed to "Yes" and "No". A copy of this instrument is found in Appendix F.

The ABLE was administered to a random sample of five experimental students in each mobile unit and to five control students randomly selected from the participating school. When those students who were administered the ABLE as a pre-test had left the program or the participating school prior to the time of post-testing, a substitute was randomly selected for the post-test. In order to qualify as a substitute, the students must have enrolled in the program or school subsequent to the collection of pre-data and have been in attendance at least 75 percent of the time the program was in operation.

Other instruments were administered to the experimental group on a pre-post design basis. The Job Application Blank (JAB), found in appendix G, was an in-house developed instrument that drew items from several similar instruments selected from employers who hire personnel with job skills similar to those being taught in the program. This instrument was used to measure the program objective of readying a student

for initial job interviews and completing employer-designed forms. The JAB was administered by the teacher in the mobile unit at the beginning of the program and again prior to the students' interviewing for employment in the community or school.

A random sample of five students was selected from each mobile unit to participate in a simulated job interview with the mobile unit teacher. These interviews, conducted both pre and post, were videotaped. The teacher was given an evaluation checklist (see Appendix H) after each interview and was asked to rate the student on each of nine factors. After each series of interviews, the students were afforded the opportunity to see themselves on the videotape playback.

The evaluation staff viewed all tapes of job interviews in random order and without identification. The evaluation staff rated them as pre or post, and completed the same evaluation checklist used by the teacher for each interviewee.

An Employer's Evaluation Form (See Appendix I) was developed to provide employers the opportunity to rate students under their supervision. As not all students in the thirty mobile units were placed in employment during the school year, data were collected only on those students employed, and from those employers who chose to provide the evaluation staff with this information.

During the initial planning sessions between State Department and county officials, the choice of reading and mathematics materials to be used in the mobile units was discussed. The Sullivan Associates Program by McGraw-Hill Book Company, was selected, and the evaluation staff was

asked to provide diagnostic instruments based on these materials, to aid in student placement. These instruments, which were called Reading Locator Tests and Math Locator Tests (see Appendices J and K) were given initially for the sole purpose of assisting in the placement of the students in a particular book within the series.

The evaluation staff did make the decision to use the Math Locator in the collection of post-data as the students pretest performance for their respective grade levels and a second measure of this skill was deemed necessary. This decision was not made for the Reading Locator Test as the reading scores on the ABLE tended to show a wide variance of ability on the pretest and it was deemed satisfactory for use in post-data collection rather than the Reading Locator Test.

The Job Interest Survey (JIS) is a pictorial, vocational interest survey designed primarily for males, and it provides a choice among four broadly defined types of vocations. One set of the JIS was provided for each of the mobile units, to be used by the teachers at their discretion. A thorough description of the JIS is given in Appendix L.

A checklist, the Semi-Weekly Student Checklist, which allowed teachers and aides to mark the progress of students twice a week on attributes of personal appearance, behavior, reaction to Learn and Earn Program, interest in regular school program, relationship to peers, and punctuality, was developed by the evaluation staff. (See Appendix M) Each attribute was rated on a 5-point scale, from high to low.

The Weekly Classroom Teaching Experience Report (see Appendix N) was prepared by the staff at the University of Florida and was used by

the teacher in each mobile unit to report what learning experience(s) during the week were noteworthy, what materials were used, how many students were involved, and whether, in the teacher's opinion, the learning experiences were successful or not. This report form proved to be very valuable as it provided the evaluation staff with continuous and up-to-date feedback throughout the program.

A nurse's-aide work sample test devised by the staff at the University of Florida was administered to a random sample of thirty-one students in the ten hospital-housekeeping units. This work sample test included bed making, taking pulse and respiration, and measuring output. A description of the work sample test appears in Appendix O.

A work sample test for automotive ignition tune-up was developed and used with a sample of twenty-six students from the twenty auto tune-up programs. A work sample board consisting of spark plugs, distributor, condensor and coil was constructed for this purpose. A description and a picture of the Ignition Tune-up Simulator are found in Appendix P.

Similarly, a work sample test was devised for the supermarket-cashiering program. It was administered to a sample of 49 students in fourteen of the twenty mobile units. A description of this work sample is given in Appendix Q.

Hypotheses

In order to test the general objectives of Learn and Earn set forth in Chapter I, the following hypotheses were developed:

I. There is no significant difference in gain in receptive vocabulary between experimental and control groups.

II. There is no significant difference in gain in self-esteem between experimental and control groups.

III. There is no significant difference in post scores in reading comprehension between experimental and control groups when adjusting for differences in intelligence and initial scores in reading comprehension.

IV. There is no significant difference in post scores in mathematical computation between experimental and control groups when adjusting for differences in intelligence and initial scores in mathematical computation.

V. There is no significant gain in participatory ability in an oral job interview among randomly selected subjects of the experimental group.

VI. There is no significant gain in ability among the experimental group to satisfactorily complete a job application form.

VII. There is no significant gain in performing on-the-job skills among the experimental group.

VIII. There is no significant difference in school attendance between experimental and control groups.

IX. There is no significant gain in personal appearance among the experimental group, as seen by teachers in the program.

X. There is no significant gain in interest in regular school program among the experimental group as seen by teachers in the program.

XI. There is no significant gain in punctuality and promptness among the experimental group, as seen by teachers in the program.

XII. There is no significant gain in relationship toward peers among the experimental group, as seen by teachers in the program.

XIII. There is no significant gain in behavior modification among the experimental group, as seen by teachers in the group.

XIV. There is no significant gain in interest in the Learn and Earn program among the experimental group, as seen by teachers in the program.

XV. There is no significant difference in job skill performance between the experimental group and a selected sample of employees using similar on-the-job skills.

CHAPTER III

Data Analysis and Interpretation

Data were collected on the participants in the Learn and Earn program on a pre-post basis on six (6) cognitive level variables as well as weekly teacher reports on seven (7) affective level variables. In addition, work sample skills were measured on a post-program basis to ascertain the degree to which pre-vocational skills in the respective programs were learned.

The change in mean scores between pre and post testing for experimental and control groups will be presented for each of the six cognitive level measures. Analysis of covariance was utilized in the analysis of reading comprehension and arithmetic computation using intelligence measures and pre reading and arithmetic scores as covariates. Analysis of regression procedures were used in the analysis of the Semi-Weekly Checklist reports made by teachers. A measure of change over time was considered significant if the slope of the regression line differed significantly from zero. Mean differences in work sample skills between Learn and Earn participants and employees in the respective occupations were analyzed by the Student's t-test.

In testing Hypothesis I, which states there is no significant difference in gain in receptive vocabulary between experimental and control groups, there was a general decrease in receptive vocabulary from pre to post in the majority of experimental and control classes. Only the control classes in one county showed a positive mean difference over the period of time. As shown in Table II the negative mean

TABLE II

Mean Differences on Peabody Picture Vocabulary Test for Learn and Earn and Control Students by County

County	Experimental Pre	Experimental Post	Mean Difference	S_E**	t-ratio	df***
A	77.3304	73.8036	-3.5268	1.283	-2.748*	112
B	80.0857	76.7905	-3.2952	.932	-3.537*	104
C	82.7447	79.2128	-3.5319	2.168	-1.629	46
D	70.0000	66.1500	-3.8500	2.667	-1.444	19
E	83.1579	80.2982	-2.8596	1.144	-2.500*	56

Mean difference for experimental group = -3.3630

County	Control Pre	Control Post	Mean Difference	S_E	t-ratio	df
A	82.0353	77.3059	-4.7294	1.477	-3.203*	84
B	84.7386	83.6818	-1.0568	1.087	-0.972	87
C	81.5946	76.8378	-4.7568	2.119	-2.245	36
D	82.2000	71.7000	-10.5000	2.892	-3.631*	9
E	83.2424	87.1515	3.9091	2.060	1.897	32

Mean difference for total control group = -2.5570

t-ratio for experimental vs control = -1.021 ns (df = 592)

*$p < .02$

**Standard error of the mean

***Degree of freedom

difference for the total control group was numerically less than for the experimental group but the difference was not statistically significant.

In County C two schools elected to operate their program on a semester basis rather than on a yearly basis. Two different groups of students, one during each semester, completed the program. The data in Table III show for the first semester that both the experimental and control groups had negative mean differences and that the mean difference between groups was not statistically significant. Data for second semester were not sufficient for analysis.

Inasmuch as both the experimental and control groups did less well on the post test, the chance of external factors operating was extremely great. Several reasons are projected by the evaluation staff concerning the results. Because of the late starting date of the program in several schools, post data collection was delayed until May in order to afford a reasonable length of time between pre and post testing. Many students, because of their family migratory patterns, had already left the schools by this time and of those who remained, many were anticipating a move northward at any moment. This anticipation is a traumatic experience for these children and as documented by both the Learn and Earn and control teachers, these children are academically and attitudinally down. Also, many of the schools in which testing was done were not air-conditioned or space was provided on stages or in cafeterias which did not prove fully adequate as a testing facility.

It is commonly known, as well, that disadvantaged youths relate

TABLE III

Mean Differences for the One Semester Programs in County C
(on the PPVT for Learn and Earn and Control Students)

First Semester					
Experimental Pre	Experimental Post	Mean Difference	S_E	t-ratio	df
82.5173	79.3217	-3.1956	1.912	-1.578	36

Control Pre	Control Post	Mean Difference	S_E	t-ratio	df
80.4621	77.3219	-3.1402	2.001	-1.462	27

Mean difference between groups = -.0554

t-ratio for experimental vs control = -.656 ns

better to hands-on experiences and less to cognitive measures that involve relating to pictures of objects and animals, as are used in the PPVT. It is our assumption with regard to the measurement of student's cognitive development that first, intelligence tests primarily evaluate cumulative conceptual development, and second that culture-free tests do not exist insofar as man by definition is born into a human society and lives and dies within a cultural context.

The above discussion points out the probable reasons for the decrease in performance shown by the students on the Peabody Picture Vocabulary Test. As the decrease was as significant for the control group as it was for the experimental group, nothing in the Learn and Earn program can be identified as showing causation toward such a difference.

The data pertinent to testing Hypothesis II, which states there is no significant difference in gain in self-esteem between experimental and control groups, is found in Table IV. The null hypothesis was retained at the α = .02 level of significance. Only the experimental and control groups in County B showed a significant gain in self concept between pre and post testing.

Both the experimental and control groups showed numerical gain in self-esteem, as measured by the Stanley Coopersmith Self Esteem Inventory (SEI) with the control group making the greater gain. However, this numerical difference was not sufficient to disprove the hypothesis of no significant difference between groups. Since a major objective of the program was to increase the self-concept of the participants and preservice training was given to teachers and aides in the use of special materials (i.e. Thiokol Kit) to enhance self-concept, the data from the SEI seem to indicate that

TABLE IV

Mean Differences on the Stanley Coopersmith Self-Esteem Inventory for Learn and Earn and Control Students by County

County	Experimental - Pre	Experimental Post	Mean Difference	S_E	t-ratio	df
A	60.0723	61.4096	1.3374	1.401	.954	82
B	56.9615	61.6923	4.7308	1.313	3.604*	103
C	61.2766	59.5319	-1.7447	2.317	-.753	46
D	59.1579	60.6316	1.4737	3.423	.431	18
E	57.0526	59.9298	2.8772	2.318	1.241	56

Mean difference for total experimental group = 2.3377

County	Control Pre	Control Post	Mean Difference	S_E	t-ratio	df
A	57.5181	58.6385	1.1205	1.583	.708	82
B	54.3908	62.1609	7.7701	1.590	4.886*	86
C	57.3333	62.3889	5.0556	2.980	1.697	35
D	53.7778	60.4444	6.6670	6.289	1.060	8
E	58.7097	61.1613	2.4516	4.349	.564	30

Mean difference for total control group = 4.3981

t-ratio for experimental vs control = -1.892 ns (df = 554)

*$p < .02$

this objective was not met to the fullest expectation.

Di Lorenzo (1969) considers self-concept as the sum total of an individual's perceptions. If an individual's self-concept can be altered, his overt behavior can be influenced. When the change in self esteem for the experimental group is analyzed in relationship to competence of the teacher and aide in the particular program area, the increase in self esteem was greater for this group than for those students who had instructors who did not have training specifically in the area being taught. The data, as given in Table V, show a significant t-ratio for gain in self-esteem for the group of Learn and Earn students who had instructors having special training in the pre-vocational skill area being taught. This tends to indicate that students gained significantly more in self esteem when their instructional personnel had a higher level of vocational competency by virtue of training and experience in the area being taught.

TABLE V

Mean Differences on the Stanley Coopersmith Self-Esteem Inventory for Learn and Earn Students by Level of Staff Preparation

Staff Preparation	Mean Difference	S_E	t-ratio	df
Yes	6.4231	1.638	3.92*	21
No	3.4712	1.972	1.76	7

*$p < .02$

Concerning Hypothesis III, which states there is no significant difference in post scores in reading comprehension between experimental and control groups when adjusting for differences in intelligence and initial scores in reading comprehension, the null hypothesis was retained. When analyzed by county, only county A showed a significant difference between experimental and control with the control groups exceeding the Learn and Earn group in reading comprehension. (See Table VI)

Several comments from teachers, taken from the Weekly Classroom Teaching Experience Report (Appendix N), indicated dissatisfaction with the programmed reading series that was supplied for use in the program. However it should be noted that these materials arrived late in the winter: many teachers had started to use other materials, and a few teachers indicated they did not know how to properly use a programmed text with their students. One of the comments taken from the Weekly Learning Experience Report was "I can't use the Sullivan Reading Books, the students cheat on them and see no relationship to the Auto program." The evaluation staff, based upon these unsolicited comments, believes that additional in-service emphasis could have been placed on the use of these materials during the program.

Reflecting upon objective two of the Learn and Earn Program, which states, "to individualize learning to allow each child to proceed at his own rate of learning," the intent and purpose are very meaningful in this type of program. The realization that in four of the five counties the control students, who were not offered the systematic opportunity of individualized learning as pursued in the Learn and Earn program, were able

TABLE VI

Means and Adjusted Means for Reading Comprehension of Learn and Earn and Control Students by County

County	Treatment	Mean	Adjusted Mean	S_E Adjusted Mean	F-ratio	df
A	Experimental	36.4500	37.5950	.9414	4.554*	1,23
	Control	45.0000	41.7283	1.6409		
B	Experimental	35.5882	37.3390	1.1451	1.504	1,25
	Control	42.0833	39.6030	1.3780		
C	Experimental	40.9231	41.9729	1.7293	.571	1,18
	Control	45.5555	44.0391	2.0857		
D	Experimental	38.8761	39.8998	1.5317	.897	1,9
	Control	40.1023	39.9726	1.8412		
E	Experimental	44.1601	43.4421	.9216	2.713	1,41
	Control	41.3279	41.7260	1.0017		
Total	Experimental	38.6012	39.5712	1.4421	1.629 ns	1,128
	Control	41.1296	40.3682	2.0016		

*$p < .02$

to read and comprehend what they read at a greater rate, implies that the materials and/or process used in teaching the materials was not as successful for the Learn and Earn students as those used for the control students in the regular school program.

The gain in mathematical computation, as measured by Part IV of the Adult Basic Learning Exam, was not significant for either the experimental or control groups in any county or for the total group. Once the post means were adjusted for initial mathematical computation scores and intelligence, the Learn and Earn students in counties C and D maintained a larger numerical gain than in the other counties. (See Table VII)

Because of the need for mathematics in each of the Learn and Earn Programs, it would seem that some increase in arithmetical computation concepts would be shown for all counties. However, if the mathematical procedures needed are not taught as an integral part of the total program, the realization of the need for mathematics in the program may not be ascertained by the students. Again, several teachers had negative comments, as taken from the Weekly Classroom Teaching Experience Report, concerning the use of programmed materials in the units. Continuing to pervade their comments were concerns of how and when to use these materials.

To test Hypothesis V, which states there is no significant gain in participatory ability in an oral job interview among selected subjects of the experimental group, video tapes were made of the teacher in each unit interviewing five students, chosen at random, at the beginning of the program and again at the end of the program. The teachers were asked to complete an evaluation sheet for each student at the conclusion of the interview. The evaluation sheet, shown in Appendix H, contained nine

TABLE VII

Means and Adjusted Means for Mathematical Computation of Learn and Earn and Control Students by County

County	Treatment	Mean	Adjusted Mean	S_E Adjusted Mean	F-ratio	df
A	Experimental	7.6000	8.3648	.5631	2.979	1,23
	Control	12.5714	10.3863	.9888		
B	Experimental	9.0588	9.2946	.9573	.006	1,25
	Control	9.7500	9.4160	1.1577		
C	Experimental	12.3846	12.4639	.8836	.811	1,18
	Control	11.3333	11.2187	1.0622		
D	Experimental	10.3333	9.9487	.7681	1.125	1,9
	Control	9.0000	9.2346	.9897		
E	Experimental	9.6285	10.3609	.9350	1.721	1,41
	Control	15.6000	13.0370	1.7848		
Total	Experimental	9.4123	9.9998	1.3976	1.235 ns	1,128
	Control	11.1976	10.7864	2.0179		

factors, each being rated on a scale from 1 to 5.

The data in Table VIII shows a positive mean difference between pre and post taping on six of the nine factors. Since the factors are not additive, each factor was analyzed separately. None of the mean differences was large enough to be statistically significant at the .02 level of probability.

The three factors which showed a slight numerical decrease from pre to post interview in the judgment of the teachers conducting the interview were general appearance, voice and speech, and fluency of speech or speech patterns. It is reasonable to see where teachers may evaluate these categories similarly in both pre and post.

The most positive gains were factors #5 (self-evaluation), #6 (attitude) and #7 (convincingness). These increases are also appropriate as they more fully approach some of the specific objectives of the program.

In order to gain a comparative measure for the evaluation of the oral interviews, a random sample of 102 of the taped inerviews were viewed by the evaluation staff and rated using the same evaluation form as the teachers. The staff was not told whether the interview was pre or post. The intra-judge reliability among the panel of staff evaluators was .88 and the multiple correlation on all factors between teachers and the evaluation staff was .79. Both of these values are significant beyond the .01 probability level.

The evaluation staff differed from the teachers on only one factor, #1 (general appearance). The staff saw an increase on this factor from pre to post which was contrary to the teacher's evaluation. Also, the numerical gain or loss (mean difference) on each factor between pre and

TABLE VIII

Mean Differences on Nine Factors of the Oral Job Interview of Learn and Earn Students

Factor	Mean		Mean Difference	Pooled S_E	t-ratio	Pooled df
	Pre	Post				
1	3.0440	2.9529	-.0911	.1186	-.7672	174
2	2.9560	2.8706	-.0854	.1239	-.6897	174
3	2.9890	2.9882	-.0008	.1353	-.0057	174
4	2.9451	3.0824	.1373	.1556	.8824	174
5	2.6923	2.8824	.1901	.1483	1.2814	174
6	3.0440	3.2235	.1795	.1476	1.2167	174
7	2.9011	2.9529	.2313	.1592	.3256	174
8	3.2527	3.3529	.1002	.1346	.7442	174
9	2.9667	3.0588	.0921	.1946	.4717	174

post interview was numerically greater than that shown by the teachers. In essence, the evaluation staff saw, and perhaps because of not being with the student on a continual basis, a much greater improvement on seven of the nine factors than did the students' own teachers. This improvement is a significant contribution of the Learn and Earn program as it shows that students became better prepared for this phase of seeking job employment.

Hypothesis VI, which states there is no significant gain in ability among the experimental group to satisfactorily complete a job application form, was refuted. A panel of three judges reviewed 351 sets of pre and post Job Application Blanks (JAB) completed by Learn and Earn students. (See Appendix G). The judges rated the JAB's on five factors; 1) legibility of handwriting, 2) clarity of information (content), 3) completeness of information, 4) consistency of information, and 5) general neatness. Each factor was evaluated on a four point scale; zero (0) if post judged poorer than pre; one (1) if post judged same as pre; two (2) if post judged slightly improved over pre; and three (3) if post judged much improved over pre.

The data in Table IX show the mean differences between pre and post for the 351 sets of job application blanks received by the judges. The intra judge reliability was .78 among the judges.

To measure to what degree the job application forms were satisfactorily completed, a random sample of 50 post Job Application Blanks were given to personnel managers or employers of a supermarket, service station, garage, and hospital. The personnel manager or employer was given the respective application blank appropriate to his business. The application forms were to be judged satisfactory or not satisfactory

TABLE IX

Mean Differences on Five Factors Used for Evaluating Improvement On the Job Application Blank

Factor	Mean Difference	t-ratio	S_E	df
1	+1.37	2.79*	.4910	350
2	+1.25	2.61*	.4789	350
3	+1.90	3.41*	.5572	350
4	+1.16	2.53*	.4190	350
5	+1.04	2.37*	.4388	350

*$p < .02$

in terms of the requirements established at the respective business firm.

The data in Table X show that 33 of the 50 application forms (66 percent) would meet the standards established for such programs. The personnel manager of the hospital was most critical, seeing only 50 percent of the 16 applications as satisfactory.

The evaluation staff considered this phase of the Learn and Earn program another important achievement. The satisfactory completion of a job application form is a necessary step toward becoming employed.

The data relevant to testing Hypothesis VII were collected on the Employer Evaluation Form. Each employer of a student from the Learn and

TABLE X

Number and Percent of Satisfactory and Unsatisfactory Job Application Blanks as Evaluated by Business Firms

Business Firm	n	Satisfactory		Unsatisfactory	
		n	Percent	n	Percent
Supermarket	12	9	75.0	3	25.0
Service station	12	8	66.7	4	33.3
Garage	10	8	80.0	2	20.0
Hospital	16	8	50.0	8	50,0
Totals	50	33	66.0	17	34.0

Earn program was requested to submit bi-weekly a progress report. As seen on the instrument (see Appendix I), there are 14 factors, each scaled categorically from good to poor in some manner. For evaluation purposes, the scaled items in each factor were assigned a numerical value, i.e., A = 5, B = 4, C = 3, D = 2, and E = 1.

As not all Learn and Earn students became employed during the program, nor did all employers submit to the evaluation staff evaluation data, the staff received reports on only 379 students. Of this number, Employer Evaluation Forms for three or more consecutive reporting periods were available on only 257 students. Because of the use of linear regression analysis for ascertaining what kind of progress was made on each of the 14 factors, only the data from the 257 students were used in the analysis.

As indicated in Chapter II, the least squares regression technique was applied to this data to determine whether the slope of the least squares regression line would differ significantly from zero. The assumption is made that if the slope is positive and does in fact differ significantly from zero, then successful progress was made by the students as seen by their employers. Data were not used from those few students who had been employed by more than one employer.

As given in Table XI, the data show that the hypothesis, which states there is no significant gain in performing on-the-job skills among the experimental group, was refuted on 11 of the 14 factors. Twelve of the 14 factors had mean ratings above 3.0 indicating that employers saw the Learn and Earn students above average on these factors.

The attendance rate, as described in Hypothesis VIII, which states there is no significant difference in school attendance between experimental and control groups, was significantly greater for the Learn and Earn Group than for the control group. The data in Table XII show the percent of absenteeism for students in the Learn and Earn units and their corresponding control group. Although no data were made available to the evaluation staff concerning the attendance of the Learn and Earn students during the 1969-70 school year, several teachers reported that the student attendance was up considerably over that of last year.

The data pertinent to Hypotheses IX through XIV were collected on the Semi-Weekly Student Checklist (See Appendix M). Teachers in each mobile unit were requested to complete this checklist twice-a-week for each student and mail it to the evaluation staff at the University of Florida.

TABLE XI

Means Regression Coefficients, t-ratios, and Standard Errors for Fourteen Factors on the Employer's Evaluation Form

Factor	Mean Rating	Regression Coefficient	t-ratio	S_E	df
Accuracy of work	3.1216	1.0012	2.971*	.3370	255
Accident record	4.7752	.2178	1.0123	.2152	255
Appearance, cleanliness	3.6813	.8749	3.1055*	.2817	255
Attendance	4.8219	.6555	2.656*	.2468	255
Attitude toward coworker	3.7500	.6741	2.7643*	.2439	255
Attitude toward public	3.2074	.9437	3.1313*	.3014	255
Handling of tools and equipment	3.0000	1.2013	3.976*	.3021	255
Initiative	3.1250	.8136	2.849*	.2856	255
Observance of safety rules	3.4692	.8997	3.010*	.2989	255
Proper care of working space	3.2069	1.2611	2.613*	.4826	255
Responsibility	2.9017	.3156	1.694	.1863	255
Speed of work	2.9841	.4776	1.873	.2550	255
Use of materials	3.3333	.9288	2.459*	.3777	255
Use of working time	3.4956	1.1157	3.601*	.3098	255

*$p < .02$

TABLE XII

Percent of Absenteeism for Learn and Earn and Control Students by Mobile Unit and Participating School

Mobile Unit	Percent of Absenteeism for Learn and Earn	Percent of Absenteeism for Control
Apopka	6.8*	8.0
Attucks	10.3	7.4
Belle Glade (1)	8.9	9.6
Belle Glade (2)	6.6	9.9
Belle Glade (3)	6.6	8.1
Carver	9.6	5.0
Deerfield Beach (1)	7.7	8.7
Deerfield Beach (2)	10.5	9.8
Denison	9.6	30.0
East Bay (1)	6.5	10.4
East Bay (2)	6.3	13.4
Everglades	12.6	6.5
Hagen Road (1)	4.1	4.5
Hagen Road (2)	6.9	10.1
Haines City (1)	3.1	11.2
Haines City (2)	4.7	10.0
Lakeland (1)	3.3	12.7
Lakeland (2)	6.4	13.4
Lakeview	8.0	10.3
Lake Wales	8.9	8.7
Margate	6.9	7.9
Marshall (1)	4.6	4.0
Marshall (2)	8.0	8.1
Ocoee	8.2*	13.4
Orange Grove	8.7	9.9
Pahokee	5.2	8.0
Pompano	3.7	7.4
Rickards (1)	6.5	10.4
Rickards (2)	4.7	11.8
Tomlin	10.3	8.7
Weighted Average	6.32	10.97

*Average of 1st and 2nd semester enrollments.

Calculated z ratio = -4.31; significant for $p < .01$

After each individual program had been in session for about eight weeks, the teachers were requested to submit these data on a bi-weekly basis rather than semi-weekly.

As each of the Hypotheses IX through XIV pertain to teachers' judgment of student behavior and interest in the Learn and Earn and regular school program, the data analysis and interpretation for all hypotheses will be presented in one summary table. The least squares regression analysis was applied to these data, also, and the assumption made that if the least square regression coefficient differed significantly from zero, this would indicate a significant gain (or loss) over time for the students on this particular attribute. Each attribute on the Semi-Weekly Student Checklist was scaled from low to high, i.e., the lowest categorical rating was given a one (1) and the highest categorical rating was given a five (5).

As not all teachers complied regularly with sending these data to the evaluation staff, and because of the use of regression analysis reports from three or more consecutive reporting periods were necessary, the analysis was completed using data on 385 students.

The data in Table XIII show that four of the six Hypotheses (#IX, #X, #XIII, #XIV) were refuted. The regression coefficients differed significantly from zero, thus the positive change over time during the program was considered significant.

The high mean ratings given by teachers on the six attributes to the students are documented further by the positive written comments that were collected on the Weekly Classroom Teaching Experience Report

TABLE XIII

Attributes from the Semi-Weekly Student Checklist
on 385 Learn and Earn Students

Attributes	Ratings	Coefficient	t-ratio	S_E	df
Personal Appearance	3.9421	1.2163	2.416*	.5034	383
Behavior	3.0192	1.1736	3.943*	.2976	383
Reaction to Learn and Earn Program	4.0000	.7439	1.897	.3921	383
Interest in Regular School Program	3.4216	.8931	1.355	.6591	383
Relationship to Peers	3.6105	.8746	2.501*	.3497	383
Punctuality	3.9047	.9043	3.141*	.2879	383

*$p < .02$

(See Appendix N). A majority of the teachers in the program pointed out on this report that they saw many positive changes in students' attitudes, cooperation, enthusiasm, and discipline. The following excerpts are given as documentation:

-- ....during our class discussion the students blossom out and discuss the issues that are presented.

-- (name) has been a definite discipline problem in the regular classroom but has done exceptionally well in our program. He craves attention, and by our smaller classes is able to gain it, so thus causes us little problem. It is amazing how his attitude and behavior have improved.

-- I was surprised that many (of my students) actually didn't know how to read a newspaper. ....after a few days now they (students) have thoroughly enjoyed this experience. All of the students contribute to the discussion and expand on various issues.

-- (name) is new to my class as of this week and he enrolled in school Monday for the first time in three years. He has worked in the fields the past three years to support himself and his blind mother. Working with (name) these few days has been one of the most rewarding experiences I have known. He is extremely mature for a fifteen year old as he has been head of his family unit and carried quite a load... Without this program (name) would be in all the regular classes and receive much less individual help.

-- When our students entered our program (Learn and Earn) many of them were known for their excessive absences. Now I can truthfully say that our absences in our trailer have decreased to almost nil. Many of our students come to school simply for our program but I can see many of their attitudes changing to a more positive side for the rest of their courses.

-- Each week I become more and more excited with the progress that the boys are making toward becoming acquainted with the knowledge of mechanics.

-- We felt our attendance was very good. Many of the children would be absent from the regular school session but would show up for their time in the trailer.

To test Hypotheses XV, which states there is no significant difference between job skill performance of the experimental group and a selected sample of employees using similar on-the-job skills, a work sample test was devised for each of the three major emphases of the program.

The work sample test for students who had participated in the Auto Tune-up program was drawn from the automotive tune-up activities of a beginning mechanic's assistant or apprentice mechanic in the automotive repair industry. The initial activity of the work sample development was the review of job analysis studies that have been conducted in the areas of automotive and agricultural mechanics occupations. After an analysis of the studies, twenty-five tasks were selected which related to ignition tune-up of the autmobile engine. The teaching equipment and tools provided in the Automotive Tune-up program were primarily oriented to the ignition system of the automobile. The twenty-five tasks selected represented most of the activities which would be associated with ignition tune-up. Another thirteen tasks were identified as being prerequisite or requisite with the twenty-five tasks which had been previously selected.

An apparatus simulating the automotive ignition system was developed on which the thirty-eight job tasks could be performed. (See Appendix P). Due to the danger of accidental shock, it was decided that the work sample would be administered when the ignition apparatus was not in operation. The apparatus was designed to include all of the essential

components of an automotive ignition system arranged in approximately the same order as found on the actual engine. The apparatus was designed to include all of the essential components of an automotive ignition system, arranged in approximately the same order as found on the actual engine. The apparatus was designed so that the components of the ignition system could be inspected, checked, removed, and replaced.

The next step in the development of the work sample was the identification of the appropriate tools to be used. Firms employing automotive tune-up mechanics were contacted to ascertain the type of equipment and tools normally used in automotive tune-up work. Automotive parts houses and tool suppliers were contacted to determine the type and style of tools most commonly used. A list of the tools most commonly used in automotive tune-up was developed. Tools were selected from the list which were appropriate for the use of the testing apparatus. Additional commonly used tools which were not appropriate for the testing apparatus were selected and added to the tool set. These additional tools were selected so that the student being tested would be forced to make a selection among commonly used tools when performing the required tasks. A list of the tools contained in the set is provided on the testing instrument found in Appendix P.

The next step was the development of the work sample testing instrument. Instructions were developed which would direct the examinee to perform the tasks that had been selected for the work sample. General instructions were prepared which were read to the examiner at the beginning of the work

sample test. Specific directions were then read to the examinee and he was given the opportunity to perform the desired task. Generous time limits were set on each of the jobs to be performed as the work sample test was designed primarily as a power test. As the student performed the job, the examiner was to observe thirty-eight specific tasks and indicate whether or not the student performed the tasks successfully.

After the preliminary work sample instrument was developed, it was pilot tested on students enrolled in a high school agricultural mechanics and automotive mechanics programs. A sample of twelve students was randomly selected from these programs for testing the instrument. These students were nearing the completion of the first year of a regular high school, vocational education program. After testing, the instrument was reorganized and some directions were reworded. A copy of the revised instrument is contained in Appendix P.

The revised instrument was administered to a sample of students in the Learn and Earn program near the end of the school term. From the twenty tune-up programs in operation, seven were selected for testing purposes. The instrument was administered to three or four randomly selected students in each of the seven programs, giving a total of twenty-six students tested with the work sample instrument. Each examinee was tested individually. The student was directed to perform the task upon the test apparatus using the set of tools that were provided by the examiner.

A comparison of the work sample scores of the Learn and Earn students and the Vocational Education students upon which the instrument was field tested is presented in Table XIV. The maximum possible score on the work

sample instrument was 38. Scores of the Learn and Earn students ranged from 26 to 35 points and the median score for both Learn and Earn students and Vocational Education students was 33 points. The mean score for Learn and Earn students was 32.1 points and the mean score for Vocational Education students was 32.0. In general the Learn and Earn students performed as well on the work sample as students who were completing their first year in the Vocational Mechanics programs.

An item analysis of the work sample results indicate that most frequent incorrect responses tended to result from improper tool selection or misunderstanding of instructions. An analysis of the total scores of the Learn and Earn students revealed that of the students scoring above the mean, 50% had 5 or less months experience in auto service work. Fifteen percent had 6 or more months experience in custodial or related work, while 23% had no work placement experience.

It must be pointed out that this was an initial use of the Auto Tune-up work sample instrument however the results appear to indicate that migrant students in the Learn and Earn program have the aptitude for learning manipulative skills of this kind when compared to high school students enrolled in a vocational mechanics program.

As simulation has been used to prepare many persons for jobs, measurement of students enrolled in the Learn and Earn supermarket program was conceived as a simulation procedure and from this evolved the work sample test for this area. The work sample was developed by examining the instructional materials which the students had used in the trailer and by observing persons on the job in a supermarket.

TABLE XIV

Comparison of Scores on Auto Tune-up Work Sample Test Between Learn and Earn Students and First Year Students in Vocational Mechanics Programs

Learn and Earn Students Scores		Vocational Mechanics Students Scores
17 - 37	Range	26 - 35
33	Median	33
32.1	Mean	32.0

These tasks were in the areas of cash register check-out operations, bagging and stock shelving. A collection of simulated items commonly found in a supermarket was assembled and this set was "checked out" and bagged by a selected sample of students and by a limited number of persons actually employed in a supermarket. In addition, another carton of items was used to stock a simulated shelf in a grocery store. Approximately 30 items were used for the work sample test. The total work sample test was administered to a total of 49 students enrolled in 14 different mobile units. Data pertinent to achievement of those students in completing the work sample are given in Table XV.

An analysis of the data in Table XV show that 49 percent of the students performing the work sample test were rated "good." A total of 87 percent, therefore, would be considered to have made significant progress in this aspect of the cashiering operations. There were five items in the cashiering operations work sample which were rated on a "yes-no" scale.

TABLE XV

Achievement Ratings of Selected Supermarket Program Students in Cashiering, Bagging, and Shelving

Characteristics of Cash Register Checkout	Good (N)	Fair (N)	Poor (N)
1. Accuracy in prices and type of product	6	34	9
2. Used the proper positioned amount control method of keyboard operation	43	6	0
3. Checked the multiple priced items together as one unit	17	20	12
4. Counted change back to customer	30	14	5

	Yes (N)	No (N)
5. Used the foot pedal for movable belt	45	4
6. Checked perishable and crusable items so that they can be placed at the top of the bag	12	37
7. Ran price checks on unmarked or illegibly priced items	49	0
8. Subtotaled to determine sales tax	35	14
9. Computed and recorded sales tax	33	16

Characteristics of Bagging	Yes (N)	No (N)
1. Were fragile and crushable items placed at the top of the bag?	44	5
2. Were frozen food items and ice cream placed in an insulated bag?	10	39
3. Were soaps, bleaches, ammonia, and odor-causing merchandise kept separate from other foods?	5	44
4. Was merchandise packed above top of any bag?	9	40

Characteristics of Shelving	Yes (N)	No (N)
1. Were similar items placed together alternating small and large?	25	22*

*In two additional situations, it was not possible to have the students shelve the collection of simulated grocery items.

For these items, 71 percent of the students performing the work sample performed satisfactorily.

The bagging operations in the work sample was not as adequately performed as the cashiering operations. Even so, approximately 50 percent of the students performed satisfactorily in this area. Also, the shelving operations were not performed as well as the cashiering operations. Again about 50 percent of the students performed satisfactorily on this part.

In order to develop some degree of validity in the work sample used in the supermarket operations, six regularly employed persons in supermarkets carried out the operations in the work sample except the stock shelving aspect. All these individuals performed quite satisfactorily as would be expected. The time required for the supermarket employees to complete the cashiering operations was about two minutes whereas the students performing the work sample required about six minutes to complete those same operations. Obviously the students were much slower than the employees, but this would be expected because of the longer on-the-job time employees were able to devote to the operations as compared to the students.

In general, the students performed quite satisfactorily on the work sample for supermarket operations. Even though no statistical data showing a relationship between students' performance on the work sample and on-the-job activity were obtained, those testers conducting the work sample operations reported a significant higher level of achievement, as well as greater poise, by those students who had had on-the-job experience in a grocery store compared to those who did not have this experience.

The work sample for hospital-patient care was developed after visiting with several members of the staff at Shands Teaching Hospital, Gainesville, Florida. Duties that were considered a part of the necessary routine of nurses aides were discussed and listed. A checklist using Yes and No responses was developed in cooperation with an assistant professor of nursing at the hospital.

A member of the evaluation staff and the two student assistants who administered the test to the Learn and Earn students were given a demonstration by the nursing professor on how to make a bed, take temperatures, pulse, and respiration and how to read liquid measures in a graduated cylinder. After the demonstration the evaluation staff member determined the level of competency on each task that would merit a yes response.

The hospital-patient care work sample test was pilot tested on eight students in two mobile units. Revisions were made, especially in the use of vocabulary, and then used to test a sample of 31 students in all ten mobile units having the program. The results of the testings are given in Table XVI as percent of successful completion of each of the 29 items. The ages of the students in the sample ranged from eleven to sixteen years of age. The range of time to complete the bed making phase of the sample was seven to eighteen minutes.

To get a comparison measure for performance on the work sample test, it was administered to four nurses aides at the teaching hospital. The data in Table XVII gives the number and percent of nurses aides who could complete the items successfully. Table XVII also lists each

of the 29 activities which composed the Hospital-Patient Care Work Sample Test.

No statistical data were performed in comparing the Learn and Earn students to the nurses aides because of the small sample size. However it appears that the Learn and Earn students performed equally well in the majority of activities.

TABLE XVI

Response of Thirty-One Students on the Hospital-Patient Care Work Sample Test

Item No.	Yes	No	NA	Percent
1	19	12	0	61
2	18	3	10	58
3	25	6	0	80
4	15	16	0	48
5	10	21	0	32
6	17	14	0	54
7	21	10	0	67
8	17	14	0	54
9	11	20	0	35
10	13	18	0	41
11	22	9	0	70
12	24	7	0	77
13	19	12	0	61
14	24	7	0	77
15	23	8	0	74
16	15	16	0	48
17	25	16	0	80
18	17	14	0	54
19	9	22	0	29
20	27	1	3	87
21	21	10	0	67
22	29	2	0	93
23	4	27	0	12
24	19	12	0	61
25	22	9	0	70
26	15	16	0	48
27	13	18	0	41
28	15	16	0	48
29	15	16	0	48

TABLE XVII

Percent Correct of 4 Employed Nurses Aides on Items on the Hospital Patient Care Work Sample Test

	Yes	No
Bedmaking		
1. Keeps linen away from body when carrying clean linen.....	50	50
2. Flattens bed and raises it for easy reaching.....	50	50
3. Puts clean linen on side of bed where she starts making bed....	75	25
4. Removes old linen by folding inward with a gentle motion.....	50	50
5. Makes one side of the bed at a time--walks around bed no more than twice.....	25	75
6. Has excess of bottom sheet at top of bed.....	75	25
7. Uses square or mitered corners at top only on bottom sheet.....	50	50
8. Puts draw sheet evenly in middle of bed using length of sheet across the bed.....	50	50
9. Bottom sheet is tight.....	50	50
10. Draw sheet is tight.....	50	50
11. On top sheet allows excess at bottom.....	50	50
12. Uses mitered or square corners at bottom only on top sheet.....	50	50
13. Top sheet smooth?.....	75	25
14. Holds pillow and pillow case in hands only--does not touch body with either case or pillow.....		
Pulse, temperature and respiration		
15. Cleans thermometer 2 or more times from clean to dirty and only using clean cotton or gauze each time--rinses properly.....	50	50
16. Shakes thermometer down with 2 or 3 quick snaps.....	75	25
17. Reads temperature accurately (you check reading).....	50	50
18. Reads pulse within 4 beats per minute of your reading.....	50	50
19. Takes respiration unobtrusively.....	50	50
20. Records readings under right headings on record sheet.....	75	25
21. When asked time for temperature, answers "3 minutes or more"...	75	25
22. Put thermometer under tongue.....	100	0
23. Knows to ask patient if he or she smoked or drank within the last ten minutes before taking temperature.....	25	75
24. Finds pulse easily.....	50	50
25. Reads pulse for 30 seconds, but not more than 5 minutes.....	50	50
26. Is able to take pulse, respiration and temperature in less than 3 minutes.....	50	50
Measuring Output		
27. Reads first measurement accurately (plus or minus 5 cc's).....	25	75
28. Reads second reading accurately (plus or minus 5 cc's).....	25	75
29. Reads third measurement accurately.....	25	75

CHAPTER IV

Summary and Recommendations

The purpose of this project was to evaluate the Learn and Earn Program over several aspects. Seven broad program objectives were identified and fifteen hypotheses were established and tested in order to ascertain the extent to which these objectives were fulfilled. This report has briefly described the program elements within the total Learn and Earn Program. Because the program was in its first year, various problems and delays occurred which were unavoidable by both state and local personnel. Also, because of these delays, in two of the five participating counties the maximum time over which student change could be recorded was only fourteen weeks.

Various instruments, checklists, surveys and work sample tests were used in collecting data for evaluation purposes. These ranged from the standardized Peabody Picture Vocabulary Test (PPVT) to teachers' weekly reports. A copy or brief description of each instrument is found in the appendices.

In the area of cognitive development, (i.e., receptive vocabulary [I.Q.]) as measured by the PPVT, reading comprehension as measured by the Adult Basic Learning Exam, (ABLE) Part II, and mathematics computation as measured by the ABLE, Part IV, the experimental group generally showed no significant advantage over the control group. On the PPVT, both the experimental and control groups did less well on the post test than on the pre. (See Chapter III for rationale) In reading comprehension, both groups showed positive gain during the program period, however there was no significant difference shown between groups.

As on the above measure, the Learn and Earn students showed no significant advantage over the control student's in ability to perform arithmetic computations. Discussion has been presented earlier in the report pertaining to the types of materials used in the program for teaching of reading and mathematics as well as discussion relating to several teachers' reluctance or inability to use them. Also, an additional factor which may well relate to this non-significant showing of the experimental group was the late hiring of teachers and aides for the program, several of whom lacked the special training needed to teach disadvantaged children as well as the proper training needed for teaching the pre-vocational skills being pursued.

The self-esteem of the Learn and Earn students as measured by the Coopersmith Self-Esteem Inventory--Short Form, showed some numerical gain, but less than that of the control group. The difference, however, was not statistically significant. The evaluation staff is cognizant of the effort made by state migrant staff members in presenting the use of the Thiokol Kit and other materials for enhancing self-concept as a means teachers could use to aid in developing a more positive concept in their students. The effect, however, did not prove totally successful as several teachers, by their comments on the Weekly Classroom Teaching Experience Report, indicated very little or no use of these materials.

It appears that the program objectives to provide hands-on, real life experiences was fulfilled much more adequately than those in the area of cognitive development. The students participatory ability in conducting oral job interviews and completing job application forms were highly successful.

The employers of those Learn and Earn students who were provided employment in association with the program saw significant positive improvement in eleven of fourteen areas of on-the-job work functions.

Another positive aspect of the program was emphasized by the significant rate of attendance shown by the Learn and Earn students over the control students. A weighted average of over four percent in average daily attendance was achieved by the experimental group over the control group. The Learn and Earn program has the significant advantage of keeping migrant students in school longer and more regularly than the regular school program.

On those characteristics where teachers observed the Learn and Earn students on a regular, time series basis, statistically significant improvement was found in student's personal appearance, behavior, relationship to peers, and punctuality. There was gain during the program in reaction to the Learn and Earn program and in interest in regular school programs, however the gain was not sufficient to be considered statistically significant.

Continuing in the area of hands-on experiences, the Learn and Earn student performance on the work sample tests was extremely successful. When compared to on-the-job employees in the respective areas or to high school students enrolled in a full year vocational program, their performance was at a similar level. Considering average age of the Learn and Earn student, the abbreviated amount of time devoted to teaching the pre-vocational skills, and because of the delay in starting the program in some areas, the skill performance of the experimental group was deemed very successful.

In accord with the above comments and rationale, the following recommendations are made for future Learn and Earn Programs:

(1) that a sufficient number of additional reading and mathematics materials be purchased to supplement or replace the McGraw Hill and LSI materials that are currently in use.

(2) that Learn and Earn teachers not be responsible for the total academic program provided the student. Those students spending less than a full school day in the mobile units made as much progress in prevocational skills and cognitive development as did those spending a full school day. A two-to-three hour block of time seems adequate to accomplish the program goals.

(3) that county staff operate programs more completely and consistently within the guidelines established by the State Department of Education.

(4) that in order to ensure the use of highly qualified personnel, the respective mobile unit teachers and aides should be able to demonstrate competency in the program area to which they are assigned.

(5) that the minimum age for students in the program be 13 years of age. Although, by allowing younger children to participate you are perhaps reaching more children who will stay in school longer, the advantages of having a minimum age of 13 in terms of work opportunities seems to outweigh those for having younger children in the program.

(6) that the program include appropriate field trips and that administrative procedure be established to accommodate such field experiences.

(7) that administrators directly involved with Learn and Earn be invited and encouraged to attend all meetings and workshops involving the program.

(8) that all teachers and aides be given released time to meet with each other and to share ideas and to discuss similar problems.

(9) that every effort be made to promote better relationships between participating school personnel and mobile unit personnel.

(10) that in those mobile units housing the hospital unit, a sink be installed in that end of the unit or that the hospital equipment and program be moved to the other end of the trailer.

(11) that the hotel-motel housekeeping program be continued only where the county coordinator deems it feasible. In all other mobile units, a different program should be initiated in that space. Suggestions are sewing, child care (where unit has access to early childhood unit), Red Cross life saving techniques, and health related occupations.

(12) that the auto tune-up mobile unit have a platform of some type constructed under one doorway to allow the use of the Sun 920 machine on live engines.

(13) that periodic in-service workshops be provided for instructional and administrative personnel with emphasis placed on the use of program materials, psychology of teaching the disadvantaged, individualized teaching methods, and training needed for the implementation and proper functioning of the prevocational programs.

APPENDIX A

TRAILER LOCATIONS

1970-71

PLACEMENT FOR AUTO-SUPERMARKET UNITS

# of Units	School
1	Rickards Middle 6000 N.E. 9th Avenue Ft. Lauderdale - Broward County
1	Pompano Beach Junior High 10 N.E. 6th Street Pompano Beach - Broward County
1	Margate Junior High 500 N.W. 65th Avenue Margate - Broward County
1	Deerfield Middle 720 Robinson Street Deerfield - Broward County
1	Everglades Middle 2400 N. W. 26th Street Ft. Lauderdale - Broward County
1	Attucks Junior High 3500 N. 22nd Avenue Dania - Broward County
1	Hagen Road Elementary 10439 Hagen Road Lake Worth - Palm Beach County
1	Pahokee Junior-Senior High 360 E. Main Street Pahokee - Palm Beach County
2	Belle Glade Junior High 501 N.W. Avenue "H" Belle Glade - Palm Beach County

Appendix A - continued

# of Units	School
2	Marshall Junior High Melon Street Plant City - Hillsborough County
2	East Bay Junior Senior High Rt. #1, Box 308 Riverview - Hillsborough County
1	Carver Junior High 5000 W. Columbia Orlando - Orange County
1	Ocoee Junior-Senior High Bluford Avenue Ocoee - Orange County
1	Lakeland Junior High 400 N. Florida Avenue Lakeland - Polk County
1	Dennison Junior High 248 Fourth Street, S.E. Winter Haven - Polk County
1	Haines City Junior High 225 S. 22nd Street Haines City - Polk County
1	Lake Wales Junior High P. O. Box 1050 Lake Wales - Polk County

Appendix A - Continued

PLACEMENT FOR HOSPITAL-PATIENT CARE

# of Units	School
1	Rickards Middle 6000 N.E. 9th Avenue Ft. Lauderdale - Broward County
1	Deerfield Middle 720 Robinson Street Deerfield - Broward County
1	Tomlin Junior High Plant City - Hillsborough County
1	Orange Grove Elelmentary 3415 - 16th Street Tampa - Hillsoborugh County
1	Lakeview Junior High W. Bay Street Winter Garden - Orange County
1	Apopka High 425 N. Park Apopka - Orange County
1	Lakeland Junior High 400 N. Florida Avenue Lakeland - Polk County
1	Haines City Junior High 225 S. 22nd Street Haines City - Polk County
1	Hagen Road Elementary 10439 Hagen Road Lake Worth - Palm Beach County
1	Belle Glade Junior High 501 N.W. Avenue "H" Belle Glade - Palm Beach County

APPENDIX B

SUPERMARKET & AUTO TUNE-UP

EQUIPMENT & MATERIALS

McGraw-Hill	Training With The Pros
#043-4613	Audio-Visual Introduction
#043-4621	Wiring Boards
#043-4639	Distributor Boards
#043-4637	Testing Boards
#043-4662	Workbook & Tests
#043-4670	Voltmeters
#043-4688	Operating Engine Boards
Jake's Office Supply	Wastebasket
General Motors	Film
Snap-On-Tools #4044-GS-B	Apprentice Tool Set with Chest
Snap-On-Tools #PT-10	Small Pick-up Tool
Snap-On-Tools #BB-4A	Hydrometer-Thermometer
Snap-On-Tools #SS 14-4	Set of two 12 foot No. 4 gauge cables for battery booster
Snap-On-Tools #OC 5-A	Small Pressure Oiler
Snap-On-Tools #CK-GA	Fender Cover
Snap-On-Tools #FB-301	Automotive Wire Gap Gauge
Snap-On-Tools #FB-316A	Ignition and Spark Plug Gauge
Snap-On-Tools #KB-5	Ignition Point File

Snap-On-Tools #GA-3	Flex Stones
MPC Educational System Model MX 200 Cook Consultants	Magnetic Earphones
Audiotronics ATC 110 Cook Consultants	Tape Recorder
Audiotronics ATC 312T Cook Consultants	Record Player
Advance Products Co., Inc. Model #AV-443 Cook Consultants	Rollabout Table
Advance Products Co., Inc. Model #AV-432 Cook Consultants	Rollabout Table
Bell & Howell #552-T Filmovara Cook Consultants	16mm Sound Projector
Bell & Howell #362 Cook Consultants	Overhead Projector
Bell & Howell #020251 Cook Consultants	Zoom Lens
Sears	AM/FM Table Radio
General Electric #2012BRN	Electric Wall Clock
Technicolor #310WS Cook Consultants	Super 8 "Instant Movie"
DuKane #14A 335E Cook Consultants	Filmstrip Projector w/phono
Draper V-Screen Cook Consultants	Projection Screen
Kodak AV 3002 Cook Consultants	Slide Projector w/Zoom Lens
Graflex #3882 Study Mates Tallahassee Camera Center, Inc.	Rear Screen Filmstrip Projector

National Cash Register Co. Model #141-50	Class 5 NCR Registers
Cramer KIK-Step Jake's Office Supply	Stool
H-O-N #W-4522 Jake's Office Supply	Executive Swivel Chair
Creative Playthings	Chalkboard
Clarin #700	Stack Chairs
Krueger #904PAP	Chairs
Sun Electric Co. #EET920	Electrical Engine Tester
Eye Gate	Educational Filmstrip Car Care for Safety
Rapid Print	Time Clock
	Time Card and Rack
	Supplies of artificial fruits, vegs., cans and empty food boxes,etc.
Delmar Publishers	Supermarket occupations Techniques, notes & tips for teachers Power Mechanics Instructor's Guide Lab Experiences Small Gasoline Engines w/Instructor's Guide
Dale Millington	Tune-Up Tips
McCormick-Mathers	Programmed instruction Basic Auto - Auto Key Pre Vocational - Key Personal Development - Key Mathematics - Key
McGraw-Hill	Automotive Elec. Equipment Workbook for Auto Testing
Cook Consultant	Projector Bulbs 1200 Watt DHT for Bell & Howell 500 Watt DFW for Carousel

Modern Learning Aids	Carburetor Idle Adjustment Servicing The Automatic Choke Auto Safety Inspection Replacing Generator Brushes Bleeding Hydraulic Brakes Testing A Thermostat Replacing A Thermostat Replacing Ignition Points Installing Spark Plugs & Wire Terminals
National Cash Register	Supermarket Checker Education Course Student Manual Student Workbook Proper Price Marking Proper Bagging Position Amount Control How to Weigh Produce Cashing Checks Test Evaluation Sheets
Sun Electric Corp.	Sun Spec. Cards - 1958-1964
Sun Electric Corp.	Sun Spec. Cards - 1965-1970
Angelica	Industrial Arts Aprons
Angelica	Cashier Smock - Aqua Color 2 - small 4 - medium 2 - large 2 - extra large
Angelica	Cashier Smock - White 4 - small 8 - medium 4 - large 4 - extra large
Angelica	Men's Lab Coats - White 1 - size 38 1 - size 40 1 - size 42
Brodhead-Garrett	Engine Training Manual
Brodhead-Garrett #8122	First Aid Insurance Kit

Brodhead-Garrett	#104
Brodhead-Garrett	#906
Coronet Films	
Finny Co.	
Finny Co.	
Delco-Remy	
	#5133C
	#5133D
	#5133E
	#9010
	#9011
	#9015
	#9025
	#9010K
	#9011K
	#9015K
	#9025K
	#9020K
	#324-1
	#324-2
	#324-3
	#324-4
	#197461
	#5179-DR
	#9005-DR
3M Products	#15-0137-8
3M Business Products	#15-0136-0
3M Business Products	
	#15-0140-2
3M Business Products	#15-0136-0

Sterilized Wiping Cloth	
Oily Waste Can	
Job Series	
Finding Your Career	
Finding Your Job Workbook	
Supplemental literature to accompany	
Audio-Tune-Up Program	
Cranking Motors & Switches	
The Ignition System	
Generators	
Introduction to Auto Electric System	
Delco & The Charging System	
Regulation & Charging Circuit	
Cranking Circuit	
Chart - Cranking Motors & Switches	
Chart - The Ignition System	
Chart - Generators	
Auto Electric System	
Charging Circuit	
Regulation & Charging Circuit	
Cranking Circuit	
20,000 Volts Under The Hood	
Delcotron Generator Circuit	
DC Circuit Maintenance	
Ignition Circuit Maintenance	
"Cranking Circuit"	
Coil & Con. Kit	
Training Aids Booklet	(no charge)
Order Blank	(no charge)
Charging System	
Starting System	
Transparency Sets for Occupational Training	
Auto-Testing-Fuel System	
Auto-Testing-Starting System	

3M Business Products
#15-0138-6

Modern Learning Aids

Auto-Testing-Spark & Ignition

Automotive Maintenance: Silent
cartridges for use with the Tech-
nicolor Super 8mm Projector
Repacking Front Wheel Bearings
Rebuilding the Master Cylinder
Replacing Bendix Brake Shoes
Rebuilding Brake Wheel Cylinders
Basic Tools For Young Auto Mechanics
Engine Trouble Shooting
Spark Plug Service
Timing On Engine
Adjusting The Distributor Cam Angle
Battery Service
Testing Generator Output

MOBILE HOSPITAL & MOTEL HOUSEKEEPING LABORATORY

EQUIPMENT AND MATERIALS

Brown-Wright	Center Desk
Brown-Wright	Two-Drawer Chest
Brown-Wright	Leg Kit
Brown-Wright	Mirror
Brown-Wright	Desk Chair
Brown-Wright	Headboard
Brown-Wright	Night Stands
Brown-Wright	Mattress and Box Springs
Brown-Wright	Bed Frame
Brown-Wright	Black w/bolt ext.
Milano	Bedspread, 96" x 110" Gypsy Red
Brown-Wright	Framed Plaque
Brown-Wright	Candaletto 18" (Black-White)
Brigadier	54" Drapes Flameproofed w/applied vinyl back, red
Brown-Wright	Travs. Rod (heavy duty)
Brown-Wright	20 oz. Dacron pillows
Brown-Wright	Pillow cases, no-iron
Brown-Wright	Sheets, no-iron
Chatham	Supreme Blankets
Brown-Wright	Folding Luggage Rack
Brown-Wright	Plastic Tray for Glasses

Brown-Wright	Large Plastic Glasses 10 oz.
Brown-Wright	Plastic Shaker Pitcher
Brown-Wright	54 x 76 Mattress Pads
Brown-Wright	Towel Rack
Brown-Wright	Cannon Bath Towel
Brown-Wright	Cannon Hand Towel
Brown-Wright	Cannon Wash Cloth
Brown-Wright	Cannon Bath Mats
Brown-Wright	Crystalon Shower Curtain
Brown-Wright	Shower-Curtain Rings
Brown-Wright	Rolls 6 x 5 Motel Wrap
Brown-Wright	Toilet Seat Bands
Harloff	Maid's Helper
Colorado Springs	Foldway Cart
Brown-Wright	6 Gal. Wet-Dry Pick Up 1 H.P. including tools
Brown-Wright	First Aid Insurance Kit
Brown-Wright	Time Card Rack (Steel)
Trainex Corp.	Sound Filmstrips
	Hospital Housekeeping
	Hospital Food Services
Carrom	Bed, electric Hi-Lo, 4" casters, two lock casters, one pair rubber bumpers, one S-5630 IV rod with storage clips.
Carrom S-6163	Safety sides, full
Simmons MBT-195	Mattress

Carrom #1965	Table, overbed
Carrom #8125	Cabinet, bedside, with Duralo basin ring, S.S. towel bar
Carrom #2807-S	Chair, side
Wilro #2025	Lamp, floor
Carrom #C1108P	Chair, easy
Hoover (Brown-Wright #101-334)	Commercial Vaccum Cleaner
JB 55 C V Pullman Model No. 7904	Vaccum cleaner, wet/dry
Pullman P-20-E	Floor machine, 1 H.P. electric motor, with polishing brush
Shampaine S-9282 W/2982 E & S 2982-G	Truck, room service, w/30" and 40" canvas bags
S3522	Truck, mopping, 2-bucket geerpress, w/wringer
Lawson #1001	Receptable, waste, torpedo, w/ inner can
Brown-Wright #270100	Ironing table
Brown-Wright 221-64	Dry iron, 3-3/4 lbs.
Contractor's discretion	Standard commercial housekeeping supplies Dust pan Dust mop Broom Wax mop Window blind mop Scrub brush for tile floor
Bell & Howell Model 545T Cook Consultants	16 MM Sound Projector
Draper V-Screen	Projector-Screen Wall Model
Westinghouse #LTH-100	Washing Machine

Westinghouse #DEH-10S	Dryer
Singer Model 648	Sewing Machine

APPENDIX C

MOBILE HOSPITAL & MOTEL HOUSEKEEPING

SUPPLEMENTARY EQUIPMENT & MATERIALS

DuKane #14A335E Cook Consultants	Filmstrip Projector w/phono
Audiotronics ATC 110 Cook Consultants	Tape Recorder
General Electric #2012 BRN	Electric Wall Clock
Bell & Howell #362 Cook Consultants	Overhead Projector
Sears	AM/FM Table Radio
Graflex #3882 Study Mates Tallahassee Camera Center, Inc.	Rear Screen Filmstrip Projector
Cramer KIK-Step Jake's Office Supply	Stool
Creative Playthings	Chalkboard
Krueger #904 PAP	Chairs
Brown-Wright	Time-Card Clock
Hoover	Upright Vaccuum Cleaner
Learning Information, Inc.	Hotel Bonus Offer Maids Bonus Offer
Vestal Laboratories	Housekeepers A-V Kit
MPC Educ System Model MX 200 Cook Consultants	Magnetic Earphones
Educational Activities, Inc. Cook Consultants	Systems of the Human Body
American Red Cross	Home Nursing Programmed Instruction Students Manual Home Nursing Instruction Guide Home Nursing Textbook

Delmar Publishers, Inc.	Health Assistant Instructor's Guide Understanding Human Behavior Manual for Nurses Aide Instructor's Guide
Coronet Films	16mm Sound Films, color Our Wonderful Body The Heart How We Breathe How It Moves How Its Parts Work Together How It Grows Cleanliness and Health Food That Build Health Dental Health Body Repairs and Maintains Itself Nervous System Muscles and Bones Digestion In Our Bodies
Robert J. Brady Co.	Student Manual-Nursing Aide Instructors Guide Student Manual - Housekeeping Instructors Guide - Housekeeping Transparencies - Housekeeping Aide

SUPPLIES (Permanent)

ARTICLE	SUPPLIER
Draw Sheets	in Surgical Company Catalog
Food trays	" " " "
Urinals (portable)	" " " "
Bed pans	" " " "
Wash basins	" " " "
Thermometers - oral & rectal	" " " "
Thermometer trays	" " " "
Sputum cups	" " " "
Catheter bags	" " " "
Surgical gowns	" " " "
Nurses' gowns (scrub gowns)	" " " "
Varied-sized basins	" " " "
Scissors	" " " "
Patients' gowns	Vestal Labs
Soap dispenser	" "
Blood pressure apparatus	" "
Wheel chair	" "
Invalid rings (rubber tubes)	" "
Hot water bottles	" "
Ice bags	" "
Trash cans	" "
Measured cups, pitchers - w/cc's	
Bowls, glasses, plates, silverware	" "
Hospital scale w/measuring rod	" "
Charts and clipboards	" "
Emisis basins	" "
Bedside pitcher w/cover	" "
Stretcher	
Rubber sheets	
Manequin	
Medicine droppers	
Enema kits	
Basic needs - filmstrips, records	Trainex Corp.
Films:	Coronet
Cleanliness and Health	
Heart, Lungs, & Circulation	
Learning About Our Bodies	
Muscles & Bones of the Body	
Your Body Repairs & Maintains Itself	
Your Health: Disease & its Control	
Your Nervous System	
Books:	
Understanding Human Behavior	Delmar Publishers, Inc.

Home Nursing Textbook	American National Red Cross
Manual for the Nurse's Aide	Delmar Publishers, Inc.
Being a Nursing Aide	Hospital Research & Educational Trust
Training the Nursing Aide	Hospital Research & Educational Trust
Your Guide to Hospital Health Careers	South Florida Hospital Assn.
Films (Catalog)	Florida Board of Health

SUPPLIES (Exhaustible)

ARTICLE	SUPPLIER
Cotton balls, rolls	in Surgical Company Catalog
Bandaids	" " " "
Guaze	" " " "
Kleenex	" " " "
Toilet paper	" " " "
Wood tongue depressors	" " " "
Cotton buds	
Alcohol	Vestal Labs
Soaps	
Vaseline	
Safety pins	
Adhesive tape	
Enema powder, salt	
Massage lotion	
Dental Care kits	Procter & Gamble

APPENDIX D

READING, MATH AND GUIDANCE MATERIALS
SUPPLEMENTARY EQUIPMENT AND MATERIALS

McGraw-Hill Book Co.	Programmed Math for Adults Book 1 Basic Addition " 2 Advanced Addition " 3 Subtraction " 4 Multiplication " 5 Division " 6 Fractions " 7 Decimals " 8 Measurement " 9 Consumer Math " 10 Personal Math " 11 More Personal Math
	Word Problem Math for Adults Book 1 Basic Addition " 2 Advanced Addition " 3 Subtraction " 4 Multiplication " 5 Division " 6 Fractions " 7 Decimals " 8 Measurement (for 10 students) Placement Exam for Series I
	Progress Tests for end of book, Series I Teacher's Manual for Series II
McGraw-Hill #79759	World of Work Kit
McGraw-Hill #44918	Teacher's Guide to World of Work
McGraw-Hill	What Job For Me? Series
McGraw-Hill	Programmed Reading for Adults Diagnostic Placement Test Booklet Book 4 - Sentence Reading
McGraw-Hill	Programmed Reading for Adults Book 5 - Paragraph Reading " 6 - Consecutive Paragraphs " 7 - Content Analysis " 8 - Functional Reading Teacher's Guide

Reading, Math and Guidance Materials (continued)

Grolier Educ. Corp.	Modern Consumer Education
Bell & Howell Cook Consultants	Cassette Player
I.P.O. Publishing Co., Inc.	Motivation Booklets You're Hired Power is Green Auto Mechanic Health Work Retail Sales Work
Hayden Book Co.	The Correct Maid
Supt. of Documents U.S. Gov't Printing Office	Occupational Outlook Handbook
Frank E. Richards	Getting Ready for Pay Day 1. Checking Accounts 2. Saving Accounts 3. Planning Ahead I Want A Job Getting and Holding a Job
Educational Activities Cook Consultants	Do It Yourself Filmstrips
California Test Bureau Div. of McGraw Hill	Arithmetic Fundamentals Self-Instruction Assortment of self-instructional booklets in arithmetic, complete w/teacher's manual and student record blanks (one Jr. & advanced for each mobile unit) Junior Advanced Locator Tests Addition Subtraction Multiplication Division
Gary D. Lawson	Everyday Business A Workbook dealing with Banking, Budgeting, Buying, Income Tax, and Insurance

APPENDIX E

PEABODY PICTURE VOCABULARY TEST

ANSWER SHEET

Copyrighted Material Deleted

contact

American Guidance Service, Inc.
720 Washington Ave, S. E.
Minneapolis, Minnesota

APPENDIX F

SELF-ESTEEM INVENTORY (SEI)
Stanley Coopersmith
University of California, Davis

Name_____ School_____

Teacher_____ Date_____

Please mark each sentence in the following way:
If the sentence tells how you usually feel, put a circle around "Yes."
If the sentence does not tell how you usually feel, but a circle around "No."
There are no right or wrong answers.

Example:

Yes No 1. I often wish I were someone else.

Yes No 2. I find it very hard to talk in front of the class.

Yes No 3. There are lots of things about myself I'd change if I could.

Yes No 4. I can make up my mind without too much trouble.

Yes No 5. I'm a lot of fun to be with.

Yes No 6. I get upset easily at home.

Yes No 7. It takes me a long time to get used to anything new.

Yes No 8. I'm popular with kids my own age.

Yes No 9. My parents usually consider my feelings.

Yes No 10. I give in very easily.

Yes No 11. My parents expect too much of me.

Yes No 12. It's pretty tough to be me.

Yes No 13. Things are all mixed up in my life.

Yes No 14. Kids usually follow my ideas.

Yes No 15. I have a low opinion of myself.

Yes No 16. There are many times when I'd like to leave home.

Learn and Earn Evaluation Project
University of Florida

Appendix F - Continued
SEI Inventory

Yes No 17. I often feel upset in school.

Yes No 18. I'm not as nice looking as most people.

Yes No 19. If I have something to say, I usually say it.

Yes No 20. My parents understand me.

Yes No 21. Most people are better liked than I am.

Yes No 22. I usually feel as if my parents are pushing me.

Yes No 23. I often get discouraged in school.

Yes No 24. Things usually don't bother me.

Yes No 25. I can't be depended on.

APPENDIX G

Learn and Earn Evaluation Project
University of Florida

JOB APPLICATION BLANK

Directions: Please fill the blanks which apply to you. If an item does not apply to you write NA. If you have any questions about the application, please ask the secretary to explain it.

Date_____

Name_____
(Last) (First) (Middle)

Present
Address_____
(Street) (City) (State) (Zip Code)

Telephone number where you can be reached_____

Do you: Own your own home_____ Live with Parents_____ Rent_____

Social Security No._____ Age_____ Date of Birth_____
Month Day Year

Sex_____ Height_____ ft.____ in. Weight_____

Divorced_____
Single_____
Married_____
Widowed_____
Separated_____

Number of children_____ Dependents other than Wife or Children _____ Citizen of USA: Yes_____ No_____

Whom should we notify in case of emergency or illiness_____
Name Relationship

_____
Address (Street, City, State, and Zip Code) Telephone Number

Position Desired_____ Date you can start_____ Salary desired_____

Are you employed now?_____ If so, may we inquire of your present employer concerning information about you?_____

EDUCATION

	Name & Location of School	Attendance Dates From To	Date Graduated	Subjects Studied
Grammar School				
High School				
Trade, Business, or Correspon-dence School				

Appendix G - Continued

What machines or equipment do you operate?_____

_____

Former Employers (Give your employment record as completely as possible with your last or present employer first).

Name of Employer	Address	Dates Worked From	To	Kind of Business	Position Salary	Reason for Leaving

Personal References: List below the names of three persons whom you have known at least one year. Do not name relatives or former employers.

Name	Address	Occupation	Number of years these persons have known you

PHYSICAL RECORD

How much time did you lose from work in the last 2 years?_____days. Reason(s)_____

_____

Were you ever injured? Yes___No___ If yes, describe_____

Does this prevent you from doing certain kinds of work? Yes_____No_____

Do you have any physical defects? Yes_____No_____ If yes, describe_____

_____

I authorize investigation of all statements in the application. I understand that misrepresentation or omission of facts called for is cause for dismissal.

Date_____ Signature of Applicant_____

APPENDIX H

University of Florida
Learn and Earn Evaluation Project

EVALUATION SHEET USED BY THE INTERVIEWER

Name_____ School_____ Date of Interview_____

Check best description

FACTORS	1	2	3	4	5
General Appearance	Poor Slovenly	Does not compare well with average	Average looks Good grooming	Makes good impression, above average	Attractive; alert, sharp, excellent dress & grooming
Voice and Speech	Distracting; Poor use of language	Dull; poor enunciation; monotone	Average voice	Very clear	Pleasing, distinct voice; work usage excellent
Fluency of Speech	Too talkative, no comments	Difficult to get to talk	Comments brief, but adequate	Complete answers. Moderate comments and questions	Comments are intelligent; responsive; easy to talk to
Composure	Jumpy; morbid; resigned.	Indifferent Too reserved	Some restraint More composed as interview progresses	Steady and calm	Composed; very much at ease; cheerful
Self-evaluation	Egotistical; Self-centered; Timid; Lacks confidence	Lacks self-trust; Shy	Inclined to be modest; self-assured; confident	Intelligent and objective; admits abilities and shortcomings	Completely self-confident; modest
Attitude	Bold; curt, rude, inattentive	Forward; flighty content	Attentive; candid without showing discourtesy	Frank, but shows tact	Unreserved; completely attentive
Convincingness	Evasive Immature Arouses doubt	Hesitant No motivation	Fairly convincing; mature	Logical; capable	Confident
Personality	Flat; disagreeable; irritating	Does not make good impression	Makes fair impression	Pleasant; makes good impression	Very pleasing; immediately likeable

Please use back of sheet for additional remarks.

Recommendation: (Would you recommend this applicant for a position?) By:

___ Yes, without reservation (5) ___ Strongly (4) ___ Only routinely (3) ___ Only in case of urgent vacancy (2) ___ Not at all (1)

APPENDIX I

Adapted from Polk County Forms

University of Florida
Learn and Earn Evaluation Project

EMPLOYER'S EVALUATION FORM

Employee's Name _____ School _____ Job Classification _____

EXPLANATION: Please rate the student-trainee on each of the following classifications by circling the appropriate letter. Select the factor which most closely describes the student's performance.

- -

Accuracy of Work
- A. Exceptionally accurate
- B. Very accurate
- C. Accurate
- D. Careless
- E. Makes many errors

Accident Record
- A. Never gets injured
- B. Seldom injured
- C. A few minor injuries
- D. Minor injuries and accidents
- E. Many injuries and accidents

Appearance, Cleanliness
- A. Exceptionally neat and clean
- B. Very neat and clean
- C. Neat and clean
- D. Untidy
- E. Slovenly and dirty

Attendance
- A. Never tardy or absent
- B. Seldom tardy or absent
- C. Off occasionally, valid reason
- D. Off occasionally
- E. Off a great deal

Attitude Toward Co-workers
- A. Well liked, very cooperative
- B. Well liked
- C. Good
- D. Poor
- E. Does not get along well

Attitude Toward Public
- A. Very eager and respectful
- B. Very helpful
- C. Helpful
- D. Does not cooperate
- E. Does not get along well

Handling of Tools and Equipment
- A. Exceptionally careful
- B. Very careful
- C. Careful
- D. Careless
- E. Rough

Initiative
- A. Exceptionally good
- B. Very good
- C. Good
- D. Poor
- E. None

Observance of Safety Rules
- A. Excellent
- B. Very good
- C. Good
- D. Disregards rules when not watched
- E. Disregards rules openly

Proper Care of Working Space
- A. Space very clean and orderly
- B. Keeps space clean and orderly
- C. Clean
- D. Careless
- E. Very untidy

Responsibility
- A. Seeks it and handles it well
- B. Likes responsibility
- C. Accepts responsibility
- D. Evades responsibility
- E. Buck-passer

Speed of Work
- A. Exceptionally fast
- B. Very fast
- C. Fast
- D. Slow
- E. Very slow

Use of Materials
- A. Always very careful
- B. Very careful
- C. Careful
- D. Careless
- E. Wasteful

Use of Working Time
- A. Always very busy
- B. Very busy
- C. Busy
- D. Loafs with others
- E. Very wasteful

Remarks for student's improvement:

Date _____ (Signed) _____
Supervisor

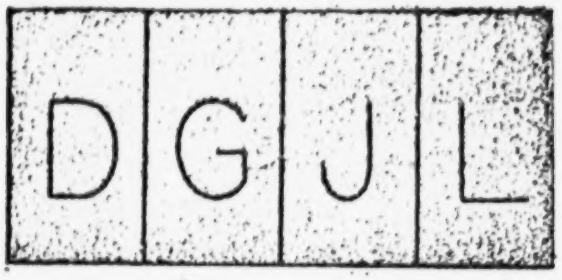
APPENDIX J

READING LOCATOR TEST

Learn and Earn Project Evaluation

Name _____ School _____

Date _____



1.

2.

3.

4.

SUB **BUS**

5.

M **N**

a b d f g h p q r t

6.

F _____

7.

B _____

8.

A _____

9.

H _____

10.

R _____

11.

rat rag

12.

cap cup

13.

bat bag

14.

bug

gun

15.

rat

hat

16.

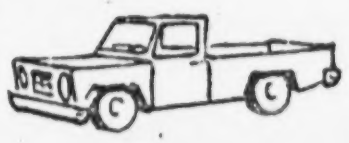
thick thing

17.

hand

land

18.



duck

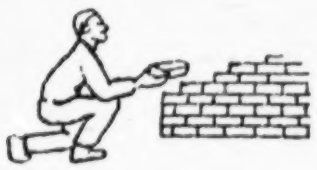
truck

Name _____

19.

give live

20.



brick

stick

21.

cats

22.

a hen

10

23.

a fan

a man

24.

Is this a cat? yes / no

25.

a can

a pan

26.

a pig

27.

a cu__

28.

a __at

29.

A map / man can sing.

30.

a fish

a dish

31.

a tack

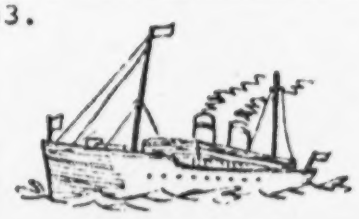
a tank

32.

a kick

a king

33.



a ship

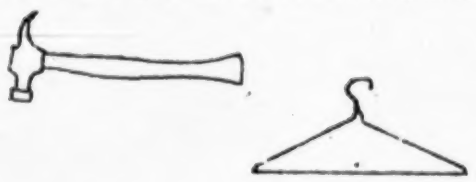
a chip

34.

The box / fox

35.

a hanger



36.

This is a truck. / man's track.

37.

Cats drink milk. / silk.

38.

a glass with a crack. / track.

39.

A man can lift a brick. / bring.

40.

Fish can swim. / swing.

41.

The black hat is his. / him.

42.

A bird can rob a bank. / flap its wing.

43.

It has a gas tank and bumpers.
It can rust into junk.

It's a truck. / shirt. / trunk.

44.

The bench in the park

is hard. / card.

45.

It starts to get hot

in spring. / string.

46.

A spotted cat is a

cat with spots. / shots.

47.

Ann Parker is a clerk

in a gift shop.

She sells g__fts.

48.

What never talks?

A man. / girl. / plant.

49.

a chicken

Name _____

50. When a car stalls, it stops running. / it runs and jumps. / it backs up.

51. A sore / A core arm hurts.

52. A quiz is a short tent. / A quiz is a short test.

53. In a hot pan, butter will sizzer. / In a hot pan, butter will sizzle.

54. The car is turning the corner. / The car is turning the cornle.

55. That is may / That is my hat on the shelf.

56. He say / He says that you mumble.

57. Nine is more / Nine is less than ten.

58. He can't understand what you say. / He can't understand what you says.

59. Patty ate a candy bar. / Patty ate a candy care.

60. When you get on a bus, you pay your far. / When you get on a bus, you pay your fare.

Jake Price is a runner. He runs the mile.

He will run today.

61. Jake's last name is Pr _ _ _.

62. He runs the quarter mile. / He runs the mile.

63. Frank thinks the shirt is rice. / Frank thinks the shirt is nice.

64. To be alone is to be by yourself. / To be alone is to be at home. / To be alone is to be with a pal.

65. When I take a bath I get into the tub. / When I take a bath I get into the tube.

66. A budget is a wild animal. / A budget is a spending plan.

67. Dan can't ever save a cent. / Dan can't every save a cent.

68. I'll do everywhere you do. / I'll do everything you do.

69. Frank Parks and Bill Parks have the same first name. / Frank Parks and Bill Parks have the same last name.

70. In the north it snows in winter.

Snow falls when it is cold. / Snow falls when it is hot.

APPENDIX K

MATH LOCATOR TEST
Learn and Earn Evaluation Project
University of Florida

Name_____ School_____

Date_____

Book 1 Basic Addition

a)

4	21	1
+3	+ 7	5
		+2

b)

	12	15
33	23	42
+16	+10	+ 2

Book 2 Advanced Addition

a)

5		8
0	4207	210
+11	+2421	+ 30

b)

2694	1986	7843
+3987	+ 758	+6075

Book 3 Subtraction

a)

13	6	758
- 1	-0	-356

b)

35	248	72687
-18	- 59	-14264

Book 4 Multiplication

a)

6	9	82
x1	x8	x 6

b)

54	967	315
x67	x 62	x122

Book 5 Division

a) $2\overline{)10}^{r}$ $5\overline{)555}^{r}$ $10\overline{)68}^{r}$

b) $14\overline{)42}^{r}$ $21\overline{)861}^{r}$ $63\overline{)1453}^{r}$

Book 6 Fractions

a) $\frac{3}{5} + \frac{4}{5}$ $2\frac{3}{4} - \frac{1}{2}$ $6\frac{1}{2} + 3\frac{2}{3}$

b) $\frac{4}{7} \times \frac{7}{12}$ $1\frac{1}{3} \times \frac{1}{3}$ $2 \div \frac{1}{3}$

Appendix K - Continued

MATH LOCATOR TEST

Name _____

Book 7 Decimals

a) $\begin{array}{r} 392.9 \\ +181.1 \\ \hline \end{array}$ $\begin{array}{r} 18.4 \\ -\ 2.9 \\ \hline \end{array}$ $\begin{array}{r} 8.41 \\ \times\ \ 2 \\ \hline \end{array}$

b) $\begin{array}{r} .05 \\ \times\ .3 \\ \hline \end{array}$ $16.1\overline{)\,4.83}$ $1.25 - \frac{3}{4}$

Book 8 Measurement

a) $\begin{array}{r} 1 \text{ qt. } 1 \text{ pt.} \\ +3 \text{ qt. } 1 \text{ pt.} \\ \hline \end{array}$ $\begin{array}{r} 7 \text{ lb. } 6 \text{ oz.} \\ -5 \text{ lb. } 4 \text{ oz.} \\ \hline \end{array}$ $\begin{array}{r} 3 \text{ ft. } 2 \text{ in.} \\ +7 \text{ ft. } 9 \text{ in.} \\ \hline \end{array}$

b) $\begin{array}{r} 1 \text{ gal. } 2 \text{ qts.} \\ +2 \text{ gal. } 3\ 1/2 \text{ qts.} \\ \hline \end{array}$ $\begin{array}{r} 4 \text{ hr. } 43 \text{ min. } 15 \text{ sec.} \\ +8 \text{ hr. } 30 \text{ min. } 45 \text{ sec.} \\ \hline \end{array}$ $\begin{array}{r} 5 \text{ yd. } 1 \text{ ft. } 6 \text{ in.} \\ -1 \text{ yd. } 2 \text{ ft.} \\ \hline \end{array}$

Learn and Earn Evaluation Project
University of Florida

APPENDIX L

JOB INTEREST SURVEY

A Picture Interest Test

I INTRODUCTION

SIGNIFICANCE OF STUDY

The Job Interest Survey was designed to help in vocational counseling for youth about to start a life-time of earning a living. Several instruments have been designed to measure the vocational interests of the "average" young person and have been used successfully in vocational exploration. However, a counseling instrument was needed to overcome some definite obstacles that are faced by the job-seeker who is disadvantaged by virtue of poverty of his culture, education or physical and mental assests. It was obvious that an instrument designed to assist in vocational choice for this population would have to be short, require only a low reading ability and have a high interest impact.

PURPOSES

The original design of the Job Interest Survey was to create a short, easily administered, easily scored instrument to be utilized by those working with youth who are about to enter the competitive job market.

Counselors, teachers, and others working with job-age youth are looking for ways to help them find congruency between youth's self-potential and a realistic training and employment slot in the world of work. But to get this congruency it is necessary for the counselor to get a clearer picture of the client's aspirations. This means he must have sufficient knowledge to be of assistance in directing the youth to vocational training and meaningful employment.

No attempt was made to use abstract and devious means to get the answers. The burden of responsibility for answering falls on the students response to a simple question. "Which of these jobs would you like to do the most?" We ask him to look at photographs showing men at work and choose from the four jobs pictured the one he would like to do the most.

RATIONALE

The Job Interest Survey is a thirty item, picture oriented inventory that had its conception in 1967 when the author recognized the need for a means to focus the attention of the disadvantaged youths to the world of work and then to select patterns of interest that form when the individual sees vocations that are opened to him. It is to the mutual interest of the counselor and the counselee to quantify and suggest relative fields of interest to areas of occupational pursuits.

II STRUCTURE OF JOB INTEREST SURVEY

The Job Interest Survey has divided 68 jobs into four categories. It was necessary in several instances to arbitrarily assign the occupation to its respective area. However, it is felt that as with the ultimate interpretations of the Inventory to each individual that the Job Interest Survey is a measurement of relative interest and its values lie in unweaving the maze of vocational counseling.

AREAS OF VOCATIONAL PURSUITS

A. Mechanical Occupations

B. Outdoor Occupations

C. Clerical Occupations

D. Service Occupations

VOCATIONS PICTURED UNDER EACH AREA

A. MECHANICAL

1. Tow truck operator
2. Lumberyard man
3. Backhoe operator
4. Small engine mechanic
5. Heavy equipment operator
6. Airplane mechanic
7. Plumber
8. Tailor
9. Locksmith
10. Welder
11. Plasterer
12. Upholsterer
13. Auto mechanic
14. Outboard mechanic
15. Dumptruck driver
16. Shoe repairman
17. Crane operator
18. Spray painter

19. Roofer
20. TV repairman
21. Auto bodyman
22. Cabinet maker
23. Watch repair
24. Appliance serviceman
25. Machinist
26. Carpenter
27. Housepainter
28. Radiator repairman
29. Sheetmetal man
30. Telephone installer

B. OUTDOOR

1. Packinghouse worker
2. Pruner
3. Picker
4. Refuse collector
5. Edger
6. Sprayer
7. Mason's helper
8. Lawnman
9. Nurseryman

C. CLERICAL

1. Draftsman
2. Grocery Clerk
3. Sign Painter
4. Bookclerk
5. Adding machine operator
6. Mimeo machine operator
7. Copier operator
8. Stock clerk

D. SERVICE

1. Janitor
2. Custodian
3. Baker
4. Presser
5. Grocer
6. Policeman
7. Dishwasher
8. Car salesman
9. Restaurant counterman
10. Barber
11. Fireman
12. Postman
13. Butcher
14. Laundryman
15. Gas man
16. Dentist

17. Pharmacist
18. Veterinarian
19. Cook
20. Waiter
21. Radio announcer

III INTERPRETATION OF THE FOUR GENERAL AREAS

I. Mechanical - those areas of work that involve manual skills, manipulation of tools or machines, and usually involve the development of a special set of skills. Examples of this area are small engine mechanic, plumber, tailor, or TV repairman.

II. Outdoor - involves outdoor or openair occupations. The selection of pictures in this area deliberately included some "field type" occupations. This allows the young man the chance to choose a classic type of work performed by many low income parents. Examples of outdoor occupations are pruner, picker, lawnman, or nurseryman.

III. Clerical - those occupations that involve keeping records, office related work, manipulating of office or clerical equipment, calculators, or routine desk type jobs.

IV. Service - would include those occupations that involve doing good things for (or to) other people. This would cover the range from unskilled jobs to professional occupations. The choices include janitor, policeman, barber, dentist, or waiter.

IV INSTRUCTIONS FOR ADMINISTRATOR OF JOB INTEREST SURVEY
* (Using IBM answer sheets)

Each student should receive:

I. One (1) answer sheet

II. One (1) #2 lead pencil

The administrator says: TAKE THE ANSWER SHEET AND PUT IN YOUR LAST NAME, FIRST NAME AND MIDDLE INITIAL. FILL IN THE DATE (give date), YOUR AGE, AND GRADE IN SCHOOL. (Do not rush and give help when possible.) IF YOU HAVE QUESTIONS, ASK AT ANY TIME. Show a diagram of page #1 of Job Booklet on the Chalk Board. Administrator then says: THIS IS A BOOK THAT SHOWS MEN DOING DIFFERENT JOBS. YOU WILL CHOOSE ONE (1) OF THE FOUR (4) PICTURES ON EACH PAGE OF THE JOB THAT YOU WOULD LIKE TO DO MOST -- YOU MUST CHOOSE ONE. THERE ARE NO RIGHT OR WRONG ANSWERS AND YOU WILL NOT GET A GRADE. PICK THE ONE JOB THAT YOU WOULD WANT TO DO THE MOST.

Pass out books. Administrator says:

1. TURN TO PAGE #1 OF THE JOB BOOKLET.
2. YOU WILL SEE PICTURES LABELED A, B, C, D.
3. LOOK AT THE PICTURES CAREFULLY AND CHOOSE THE ONE JOB THAT YOU WOULD LIKE TO DO THE MOST. YOU MUST CHOOSE ONE.
4. WHEN YOU HAVE MADE YOUR CHOICE ON PAGE #1, LOOK AT THE ANSWER SHEET WHERE IT SAYS "1". YOU WILL SEE A, B, C, AND D, AFTER "1". (Administrator shows example on the chalk board).
5. Administrator says: IF YOU HAVE CHOSEN THE JOB YOU WOULD LIKE TO DO THE MOST, DARKEN THE SPACE BETWEEN THE LINES ON THE ANSWER SHEET THAT HAS THE SAME LETTER AS THE JOB YOU CHOSE IN THE BOOK. MAKE THE LINES VERY DARK.

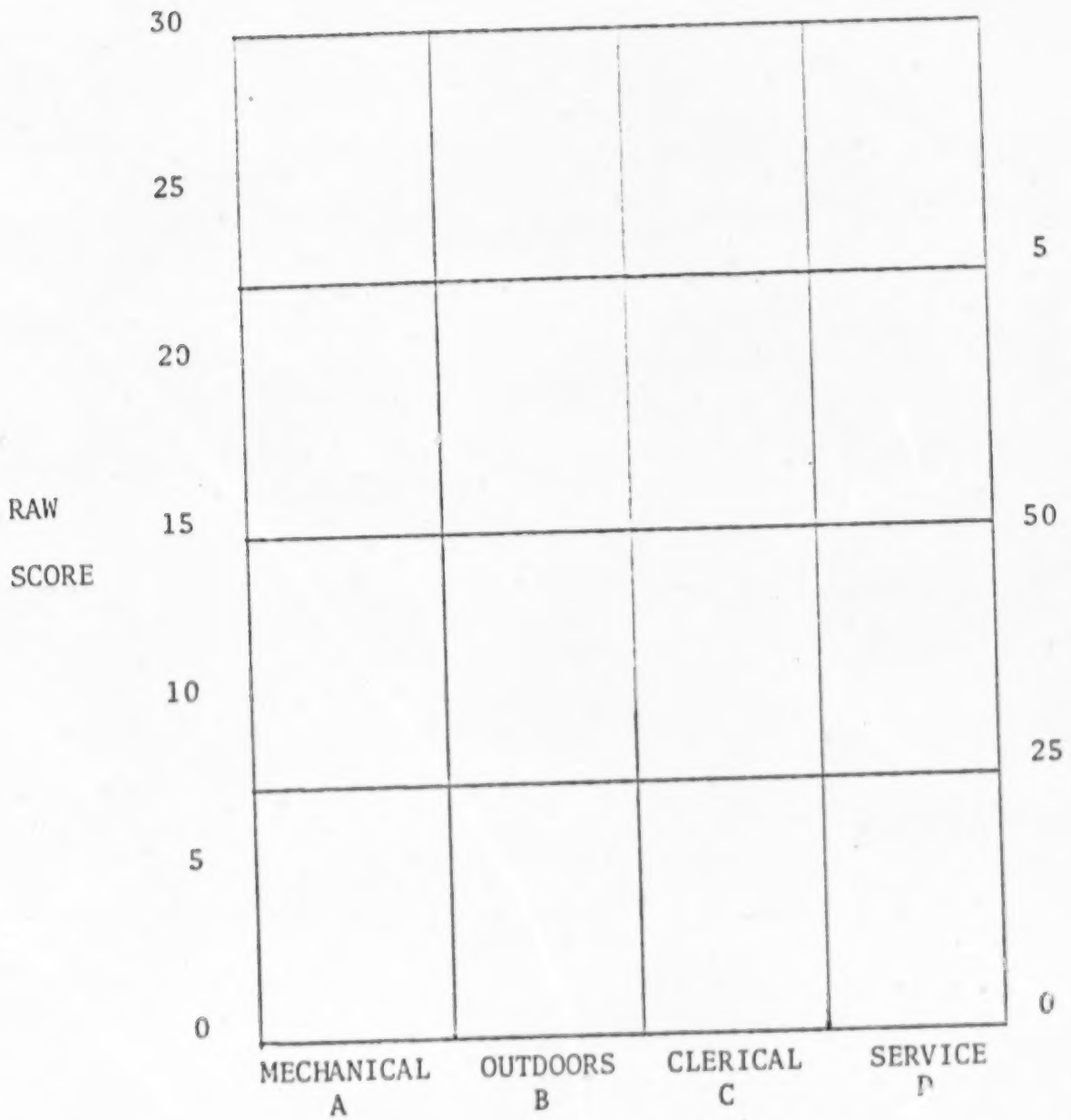
(Wait until every one has finished page #1).

6. NOW TURN TO PAGE #2. CHOOSE THE JOB THAT YOU WOULD LIKE TO DO THE MOST. YOU MUST CHOOSE ONE. WHEN YOU HAVE MADE YOUR CHOICE ON PAGE #2, LOOK AT THE ANSWER SHEET WHERE IT SAYS "2". NOTICE THAT "2" IS ACROSS FROM "1". DO NOT GO DOWN THE PAGE. GO ACROSS. YOU WILL SEE "A, B, C, D." (Administrator shows example under #2 on chalk board).

7. WHEN YOU HAVE CHOSEN THE JOB YOU WOULD LIKE TO DO MOST, DARKEN THE SPACE UNDER THE LETTER OF YOUR CHOICE. (Help through first two pages.) TAKE AS LONG AS YOU WANT. THERE ARE NO TIME LIMITS. WHEN YOU FINISH A PAGE YOU MAY GO ON TO THE NEXT. ARE THERE ANY QUESTIONS?

* Student may mark his answer (A, B, C, or D.) on a sheet numbered from 1-30.

V. INDIVIDUAL INTERPRETATION SHEET



Mark the number of answers for each choice (A,B,C, or D) in the appropriate column according to the "Raw Score" indicated in the left hand column. The Percent of Total is indicated on the right hand side of the profile.

RACE - W B S O

NAME

AGE

GRADE

SCHOOL

VI JOB TRAINING POSSIBILITIES FOR YOUTH

1. OFFICE AND CLERICAL

Typists
Typists (clerical)
Stenography, typing, filing and related occupations
Clerk, general (clerical)
Computing machine operators
Stock clerks and related occupations
Sales clerks
Grocery clerk (retail trade)

2. WAITERS, WAITRESSES AND RELATED FOOD SERVING OCCUPATIONS

Bus boy (hotel & rest.)
Bus girl (hotel & rest.)
Car hop (hotel & rest.)
Coffee girl, cafeteria or restaurant (hotel & rest.)
Countergirl, lunchroom or coffee shop (hotel & rest.)
Countermen, cafeteria (hotel & rest.)
Floorgirl, cafeteria (hotel & rest.)
Runner (hotel & rest.)
Steam table attendant (hotel & rest.)
Waiter, informal (hotel & rest.)
Waitress (hotel & rest.)
Bartenders
Bar boy (hotel & rest.)

3. MISCELLANEOUS FOOD AND BEVERAGE PREPARATION OCCUPATIONS

Pantryman (hotel & rest.)
Salad girl (hotel & rest.)
Sandwich girl (hotel & rest.)
Coffee man (hotel & rest.)
Cook helper (hotel & rest.)
Kitchen workers
Dishwasher, machine (hotel & rest.)
Potwasher (hotel & rest.)
Silver wrapper (hotel & rest.)
Fountain girl (hotel & rest.)

4. MAIDS AND HOUSEMEN HOTELS AND RESTAURANTS AND RELATED ESTABLISHMENTS

Chambermaid (hotel & rest.)
Houseman (hotel & rest.)
Linen room houseman (hotel & rest.)
Maid (any ind.) II
Maid, hospital (med. serv.)
Bellman and related occupations

Doorman (any ind.)
Manicurists
Manicurist (pers. serv.)
Cabana boy (hotel & rest.)

5. ATTENDANTS, HOSPITALS, MORGUES AND RELATED HEALTH SERVICES

Nurse aide (med. serv.)
Orderly (med. serv.)
Sanitation aide
Tray line worker (med. serv.)

6. MISCELLANEOUS PERSONAL SERVICE OCCUPATIONS

House parent (govern. serv.)
Kindergarten (any ind.)
Teacher, nursery school (any ind.)

7. LAUNDERING AND CLEANING OCCUPATIONS

Laundryman, hand (laund.)
Washer, machine
Puller (laund.)
Washing Machine loader and Puller (laund.)
Laundry laborer (laund.)
Dry cleaning occupations
Rug cleaner helper (clean, dye and press)
Presser, hand
Press operator (laund.)
Shirt presser (laund.)
Folder (laund.)
Marker (clean, dye and press)
Porters and cleaners
Porter (any ind.) I
Janitor (any ind.) I

8. BUILDING AND RELATED SERVICE OCCUPATIONS

Exterminator (any ind.)
Window Cleaner (any ind.)

9. FARMING OCCUPATIONS

Farm hand, citrus fruit (agric.) II
Tree pruner (agric.)

10. HORTICULTURAL SPECIALTY OCCUPATIONS

Laborer, nursery (agric.)

Greenhouse worker (agric.)
Groundskeeper (any ind.)
Laborer, landscape (agric.)

11. MECHANICS AND MACHINERY REPAIRMAN

Lawn mower repairman (any ind.)
Filing, grinding, buffing, cleaning and polishing
Grinder, belt (any ind.)
Grinder, chipper (any ind.) I
Burrer (mach. shop)

12. PAINTERS

Painters, brush
Painters, spray
Painter, spray (any ind.)
Painter helper, spray
Painting, decorating and related occupations
Masker

13. LAYING OUT, CUTTING, CARVING, SHAPING AND SANDING WOOD PRODUCTS OCCUPATIONS

Sander, machine (woodworking)
Nailer, hand (any ind.)
Cabinet assembler (furn.)

14. UPHOLSTERING AND FABRICATION AND REPAIR OF MATTRESSES AND BEDSPRINGS OCCUPATIONS

Upholsterer (furn.) II

15. WELDERS

Welder helper (welding)
Flame cutters

16. CARPENTERS AND RELATED OCCUPATIONS

Laborer, carpentry (constr.)

17. PLUMBERS, GAS FITTERS, STEAMFITTERS AND RELATED OCCUPATIONS

Laborer, plumbing (constr.)
Plumber helper (constr.)

18. FLOOR LAYING AND FINISHING OCCUPATIONS

Floor layer helper (constr.)
Roofers
Roofer helper (constr.)

19. MISCELLANEOUS CONSTRUCTION OCCUPATIONS

Construction worker (constr.) I
Fence erector (constr.)
Lawn sprinkler installer (constr.)
Mortar mixer (constr.)

20. STRUCTURAL MAINTENANCE OCCUPATIONS

Swimming pool servicemen (any ind.)
Structural work occupations
Maintenance man helper, building (any ind.)

21. ATTENDANTS AND SERVICEMEN, PARKING LOTS AND SERVICE FACILITIES

Automobile service station attendant (auto. serv.)
Tire changer (auto. serv.)
Tire repairman (auto. serv.)
Lubrication man (auto. serv.)
Automobile washer (auto. serv.)

APPENDIX M

LEARN AND EARN EVALUATION PROJECT
University of Florida
Gainesville

Semi-Weekly Student Check List

Name _____ School _____

Teacher _____ Date _____

Please check your evaluation of the student in regard to each of the following characteristics:

1) Personal appearance:

_____ very good
_____ good
_____ fair
_____ poor
_____ very poor

2) Behavior:

_____ very good
_____ good
_____ fair
_____ poor
_____ very poor

3) Reaction to this program:

_____ very interested
_____ mildly interested
_____ somewhat interested
_____ hardly interested
_____ not interested

4) Interest in regular school program:

_____ very high
_____ high
_____ average
_____ low
_____ very low

5) Relationship to peers:

_____ very friendly
_____ friendly
_____ a little friendly
_____ somewhat friendly
_____ unfriendly

6) Punctuality:

_____ very good
_____ good
_____ fair
_____ poor
_____ very poor

APPENDIX N

LEARN AND EARN PROGRAM
Weekly Classroom Teaching Experience Report
University of Florida, 1970

Teacher_____ Program (check one) Automotive ( )
Supermarket ( ) Date_____
Hosp. Motel ( )

1. Specific materials used in the Teacher Experience: _____

_____

_____

_____

2. How many students involved?_____

3. Describe the teaching experience in one or two paragraphs:

_____

_____

_____

_____

_____

_____

4. Did you consider it beneficial or successful? Yes____No_____

Why?_____

_____

_____

_____

_____

Please use separate page if necessary.

APPENDIX O

Migrant Compensatory Education Evaluation Project

WORK SAMPLE - NURSE'S AIDE DOT 355.878

INTRODUCTION

The purpose of this test is to measure the student's capacity to master some of the basic duties of the nurse's aide job. It is also designed to provide the student with a realistic "feel" of the job as a job-exploration experience. The test is divided into 3 sub-sections: (1) bed making, (2) temperature, pulse, and respiration taking, and (3) output measurement.

The following traits are measured by these sub-tests: bed making - manual dexterity, work rhythm, following verbal instructions, retention, neatness; temperature-taking - following verbal instructions, retention, accuracy, and counting ability; pulse and respiration - following verbal instructions, retention, counting ability and accuracy; output measurement - counting ability, reading ability of calibrated instrument, and accuracy.

The following equipment will be needed for these samples:

Bed making

1 pillow and pillowcase

hospital bed and mattress - bed already made up

3 cotton sheets or 2 sheets and draw sheet

Temperature, pulse, and respiration

2 oral thermometers

stopwatch or watch with second hand

1 person to serve as a subject

Output measurement

1 calibrated 1000 cc graduate

1 bottle with about 3/4 gallon of yellow liquid

Appendix O - Continued (2)

INSTRUCTIONS FOR NURSE'S AIDE - WORK SAMPLE

The following work sample should be conducted in a regular hospital room which is equipped with a standard hospital bed, chair, and table. The bed should have appropriate linen on it when the test begins. The examiner should place the 1000 cc measure on the table along with the gallon container, and two oral thermometers. Cleaning swabs should also be placed on the table. The examiner should sit on the chair while the student takes his pulse, temperature, and respiration.

There should be only one student in the room at a time, and other students should not be allowed to observe the test. The examiner should read the instructions clearly and he should not answer any questions during the test.

The examiner should complete the check sheet item as each task is performed. Record time for making bed and time taken for the entire test.

Appendix O - Continued (3)

INSTRUCTIONS FOR CONDUCTING WORK SAMPLE FOR NURSE'S AIDE - DOT 355.878

BED MAKING: Unoccupied, closed bed

Lower the hospital bed and crank up the head end. Bed should have dirty linen on it. Stack clean linen across the room from the bed. The student will have to carry the linen to the work station.

Say to the student, "PLEASE REMOVE THE DIRTY LINEN FROM THIS BED AND PUT ON A CLEAN BOTTOM SHEET, DRAW SHEET, TOP SHEET, AND A CLEAN PILLOWCASE. MAKE A CLOSED BED." (If possible, furnish a dirty linen receptacle or indicate where the dirty linen is to be placed).

Make out the check sheet (Items 1-14).

TAKING TEMPERATURE, PULSE, AND RESPIRATION

Have two oral thermometers ready and put a stopwatch where both you and the student can read it. Give the student a thermometer and say, "THIS IS A DIRTY THERMOMETER--CLEAN IT AND SHAKE IT DOWN PLEASE." If the thermometer is properly cleaned, let the student use it for the following part of the test, but if you think it is not clean, then supply the student with a clean thermometer.

Say, "NOW PLEASE TAKE MY TEMPERATURE, PULSE, AND RESPIRATION. WRITE DOWN YOUR RESULTS HERE." Point to a piece of paper on which is written pulse_____, temperature_____, respiration_____. While the student is taking these three readings, you should be taking your own pulse by feeling your neck. Be as casual as possible about this so the student will not be aware that you are doing it.

Then ask, "WHAT SHOULD YOU ASK A PATIENT BEFORE YOU TAKE HIS TEMPERATURE? HOW LONG SHOULD THE THERMOMETER STAY IN THE PATIENT'S MOUTH?"

Make out a check sheet (Items 15-26).

MEASURING OUTPUT

Provide a 1000 cc graduated measuring cylinder and a gallon container of yellow liquid. Pour 400 cc's of liquid into the graduate cylinder and ask, "PLEASE TELL ME HOW MANY CC'S OF LIQUID ARE IN THIS CYLINDER." Then pour some more liquid in--so that there are about 730 cc's and ask the same question; then pour some liquid out of the cylinder so that 640 cc's remain and ask the same question. Get three readings from the student and score on the check sheet as a "Yes" if the answers are within 5 cc's (plus or minus) of the correct reading.

Make out the check sheet (Items 27-29).

Appendix O - Continued (4)

CHECK SHEET FOR WORK SAMPLE -- NURSE'S AIDE -- DOT 355.878

Name _____ School _____ Date _____ Age _____

		Yes	No
Bed making			
1.	Keeps linen away from body when carrying clean linen	___	___
2.	Flattens bed and raises it for easy reaching	___	___
3.	Puts clean linen on side of bed where she starts making bed.	___	___
4.	Removes old linen by folding inward with a gentle motion	___	___
5.	Makes one side of a bed at a time--walks around bed no more than twice	___	___
6.	Has excess of bottom sheet at top of bed	___	___
7.	Uses square or mitered corners at top only on bottom sheet	___	___
8.	Puts draw sheet evenly in middle of bed using length of sheet across the bed	___	___
9.	Bottom sheet is tight.	___	___
10.	Draw sheet is tight.	___	___
11.	On top sheet allows excess at bottom	___	___
12.	Uses mitered or square corners at bottom only on top sheet	___	___
13.	Top sheet smooth?	___	___
14.	Holds pillow and pillow case in hands only -- does not touch body with either case or pillow	___	___
Pulse, temperature, and respiration			
15.	Cleans thermometer 2 or more times from clean to dirty end only	___	___
16.	Shakes thermometer down with 2 or 3 quick snaps	___	___
17.	Reads thermometer accurately (you check reading)	___	___
18.	Reads pulse within 4 beats per minute of your reading	___	___
19.	Takes respiration unobtrusively	___	___
20.	Records reading under right headings on record sheet	___	___
21.	When asked time for temperature, answers "3 minutes or more"	___	___
22.	Put thermometer under tongue	___	___
23.	Knows to ask patient if he or she smoked or drank within the last ten minutes before taking temperature	___	___
24.	Finds pulse easily	___	___
25.	Reads pulse for 30 seconds, but not more than 3 minutes	___	___
26.	Is able to take pulse, respiration and temperature in less than 5 minutes	___	___
Measuring output			
27.	Reads first measurement accurately (plus or minus 5 cc's)	___	___
28.	Reads second measurement accurately (plus or minus 5 cc's)	___	___
29.	Reads third measurement accurately	___	___

Time for making bed _____

Time for whole work sample _____

APPENDIX P

DESCRIPTION OF WORK SAMPLE APPARATUS

The Work Sample apparatus consisted of a box, housing, electric motor, transformer and controls. A distributor was mounted on top of the box. The distributor was operated by the electric motor. Eight spark plugs, resistor and coil were secured to the top of the box. All components were wired together, simulating the ignition system of the automobile engine. The electric motor which turned the distributor was controlled by a variable speed foot pedal. Electrical components were arranged in an order as found on the auto engine. Electrical components were removable and serviceable on the apparatus.

Appendix P - Continued

MIGRANT COMPENSATORY EDUCATION EVALUATION PROJECT

Automotive Ignition Tune-up Work Sample

The following performances are to be conducted on the ignition simulator, provided by the examiner, using the set of tools provided by the examiner. Each of the performances is to be conducted by the individual student, without outside coaching or assistance, and at the direction and signal of the examiner.

The examiner should read only the "directions" to the student. The directions should be read one at a time, allowing the student to perform the task indicated before proceeding to the next set of objectives. The examiner should check either "yes" or "no" on the answer sheet for each criteria as the tasks are performed. Maximum time limits are placed on each objective. At the end of the time indicated, the examiner will prepare the testing apparatus and read the next directions. Timing should begin after each set of directions are read.

Students to be examined should not be allowed to observe other students during the examination. Students should not be allowed to read this test form or the answer sheet.

The examiner should read the following general directions to the student before beginning the examination: "I am going to ask you to do several different things to this auto ignition simulator. Please use this set of tools (display the set of tools).* I will read the directions for each job I want you to do. Wait until I have read the directions and have signaled for you to start, then do only what the directions say. This is not a speed test, so you will be given reasonable time to complete each task."

Complete the information on the left side of the answer sheet before beginning the test.

The breaker points should be set at 20 thousandths of an inch. The gap of spark plug number eight should be set at 40 thousandths of an inch.

---

*The tool set consists of one each of the following: straight screwdriver, Phillip's screwdriver, knife blade feeler gauge, wire feeler gauge, 8-inch pliers, 9/15-inch box-open wrench, 3/8-inch box-open wrench, 3/4-inch open-end wrench, plug socket, 9/16-inch socket, 3/4-inch socket, pull handle.

Appendix P - Continued - Automotive Ignition Tune-Up Work Sample Test

OBJECTIVE NO. 1: The student will select the correct tools and remove the 3/8-inch by 2-inch SAE bolt from the apparatus. The student will then replace the bolt and tighten, using the tools selected.

DIRECTIONS: "Select the correct tools from those provided, and remove the bolt indicated by the 'B' on the apparatus."

TIME LIMIT: 1 minute.

Criteria: 1 The student selected the correct tools .....

Criteria: 2 The student successfully removed the bolt.....

CONDITION: Bolt and nut are removed and separate.

DIRECTIONS: "Replace the bolt and tighten the nut."

TIME LIMIT: 1 minute.

Criteria: 3 The student replaced the bolt.....

Criteria: 4 The student successfully tightened the nut.....

OBJECTIVE NO. 2: The student will select the correct tool and successfully remove the distributor cover.

DIRECTIONS: "Select the correct tool and remove the distributor cover."

TIME LIMIT: 1 minute.

Criteria: 5 The student selected the correct tool.....

Criteria: 6 The student successfully removed the distributor cover.....

OBJECTIVE NO. 3: The student will successfully identify, by pointing, the selected ignition components.

CONDITION: Distributor cover removed.

DIRECTIONS: "Identify, by pointing or touching, the following ignition components as I name them."

TIME LIMIT: 2 minutes.

Criteria: 7 The student identified the components -

"A" - condensor.....

"B" - breaker points.....

"C" - rotor.....

"D" - vacuum advance.....

"E" - coil.....

Appendix P - Continued - Automotive Ignition Tune-up Work Sample Test

"F" - primary coil lead.....

"G" - high-tension coil lead.....

"H" - spark plug wire.....

"I" - spark plug.....

OBJECTIVE NO. 4: The student will select the correct tool and successfully remove the rotor.

CONDITION: Student is informed as to what is the rotor.

DIRECTIONS: "Select the correct tool from those provided, and remove the rotor. I will ask you to replace it later."

TIME LIMIT: 1 minute.

Criteria: 8 The student selected the correct tool.....

Criteria: 9 The student successfully removed the rotor.....

OBJECTIVE NO. 5: The student will select a knife feeler gauge and check the breaker point opening and correctly state whether the point opening is okay or not okay, given orally the correct setting and tolerance.

CONDITION: Rotor removed.

DIRECTIONS: "Check the breaker point gap with the knife feeler gauge and tell whether or not the gap setting is okay or not okay. The correct gap setting is 20 thousandths of an inch, plus or minus 2 thousandths."

TIME LIMIT: 1 minute.

Criteria: 10 The student selected the knife feeler gauge.....

Criteria: 11 The student selected the correct blade.....

Criteria: 12 The student correctly oriented the cam.....

Criteria: 13 The student correctly inserted the feeler gauge.....

Criteria: 14 The student correctly determined the acceptability of the setting.....

OBJECTIVE NO. 6: The student will identify the correct tool to use in removing the condensor.

DIRECTIONS: "Show me the tool you would use to remove the condensor."

TIME LIMIT: 1/2 minute.

Appendix P - Automotive Ignition Tune-up Work Sample Test

Criteria: 15 The student named the correct tool to use in removing the condensor.....

OBJECTIVE No. 7: The student will successfully replace the rotor.

DIRECTIONS: "Replace the rotor."

TIME LIMIT: 1 minute.

Criteria: 16 The student correctly positioned the rotor.....

Criteria: 17 The student inserted the screws.....

Criteria: 18 The student successfully replaced the screws.....

OBJECTIVE NO. 8: The student will correctly replace the distributor cover.

CONDITION: Rotor in place.

DIRECTIONS: "Replace the distributor cover."

TIME LIMIT: 1 minute.

Criteria: 19 The student correctly positioned the cover.....

Criteria: 20 The student correctly positioned both locks.....

OBJECTIVE NO. 9: The student will correctly remove the spark plug, and correctly state whether the spark plug gap setting is okay or not okay, given the setting and tolerance, and replace the spark plug.

DIRECTIONS: "Remove the spark plug number 8."

TIME LIMIT: 1 minute.

Criteria: 21 The student removed the spark plug lead.....

Criteria: 22 The student selected the spark plug wrench.....

Criteria: 23 The student successfully removed the spark plug.....

CONDITION: Spark plug out, lead off.

DIRECTIONS: "Using the wire feeler gauge, check the spark plug gap and state whether or not the gap setting of the spark plug is okay or not okay. The correct gap setting is 35 thousandths of an inch, plus or minus 2 thousandths."

Appendix P - Automotive Ignition Tune-up Work Sample Test

Criteria: 24 The student selected the wire feeler gauge.....

Criteria: 25 The student selected the correct wire gauge.....

Criteria: 26 The student correctly inserted the wire feeler gauge.....

Criteria: 27 The student correctly stated the accuracy of the spark plug gap setting.....

DIRECTIONS: "Replace the spark plug and lead."

TIME LIMIT: 1 minute.

Criteria: 28 The student correctly threaded the spark plug.....

Criteria: 29 The student used a spark plug wrench to tighten the spark plug.....

Criteria: 30 The student replaced the spark plug lead correctly.....

MIGRANT COMPENSATORY EDUCATION EVALUATION PROJECT

AUTOMOTIVE IGNITION TUNE-UP

PERFORMANCE TEST

DATE OF EXAM _____

_____ _____
STUDENT'S NAME AGE

_____
SCHOOL'S NAME TEACHER'S NAME

NO. OF DAYS IN LEARN AND EARN PROGRAM: _____

NO. OF DAYS WORKED IN JOB PLACEMENT: _____

IS STUDENT NOW EMPLOYED? (YES) (NO)

STUDENT'S WORK INVOLVES (CHECK ONE):

AUTO TUNE-UP____ JANITORIAL___SERVICING_____

SALES_____PARTS REPLACEMENT____ (OTHER)_____

TOTAL CORRECT RESPONSES_____

PAGE 5		PAGE 4		PAGE 3		PAGE 2	
YES	NO	YES	NO	YES	NO	YES	NO

APPENDIX Q

INSTRUCTIONS FOR ADMINISTERING SUPERMARKET
WORK SAMPLE

The person administering the work sample should place the groceries (see attached list) on the movable counter in front of the cash register. Three students should be randomly selected; one should play the role of the customer, one should be the cashier, and the other should be the person doing the bagging of the groceries.

Say to the customer, "Here is $20." (Give him a real or play 20-dollar bill.) You are to play the role of the customer by handing this money to the cashier when she asks for the price of the order.

Say to the cashier, "Please check out these groceries for this customer." (Indicate those groceries on counter.) "You may refer to this price list (point to price list attached to register) if the prices marked on each item are not clear. Remember, present all totals on your cash register tape as if you were serving a customer in a grocery store. You will be timed from the moment you push your first key until you give the change to your customer." (Change should be placed in the cash register drawer.)

No conversation should be permitted while the work sample test is being given.

Say to the person bagging the groceries, "Please place these groceries in bags." Student should not be required to start until enough items are before him for bagging.

Rotate students so that each one fills each of the 3 roles, customer, cashier, and bagger. Fill out check sheet for each student as he performs in the cashier and bagging roles.

After each student has performed as a cashier and bagger, ask him, "Please take these boxes of cereal and place them on the empty shelf as they should be shelved in a real grocery store." Furnish him with cereal boxes of different types and sizes (see list) and mark checklist.

PRODUCTS LIST

Product Name	Price
Arrow white bleach	$ .29
Astor, Coffee	.69
Astor, Ground Nutmeg	.29
Banquet, Beef Pie	.17
Borden, Ice Milk Bar	.29
2 Campbell's, Tomato Soup	2/.28
Campbell's, Turkey Noodle Soup	.21
Chef Boy-ar-dee, Cheese Pizza	.69
Cold Power	1.24
2 Del Monte, Orange Drink	3/1.00
Johnson, Glo-Coat	.79
Kellogg's, Blueberry Frosted Tarts	.45
Kellogg's, Raisin Bran	.35
Kellogg's, Sugar Frosted Flakes	.45
Kraft, Miracle Margarine	.35
Kraft, Bridge Mix	.49
LaChoy, Singapore Salad	.52
LaChoy, Sweet and Sour Sauce	.45
Manpower Deodorant	.83
Mr. Clean	.39
Nabisco, Vanilla Wafers	.40
Pantry Pride, Milk	.33
Pinebreeze, Eggs	.79
Swanson, Fried Chicken Dinner	.69
Swanson, Swiss Steak	.79
1-6 pk. Coca Cola	.67
Bottle Deposit	.18

APPENDIX Q

Name_____
School_____
Date_____

CHECKLIST FOR SUPERMARKET WORK SAMPLE

1 2 3 CHECKING: (Scale: 1-good, 2-fair, 3-poor)

(1) Accuracy in prices and type of product.

(2) Used the proper positioned amount control method of keyboard operation.

(3) Checked the multiple priced items together as one unit.

(4) Counted change back to customer.

(Scale: Yes - No)

(5) Used the foot pedal for movable belt.

(6) Checked perishable and crushable items so that they can be placed at the top of the bag.

(7) Ran price checks on unmarked or illegibly priced items.

(8) Subtotaled to determine sales tax.

(9) Computed and recorded sales tax.

(10) What amount of time was taken to check the order?

Yes No NA BAGGING: (Scale: Yes - No)

(1) Were fragile and crushable items placed at the top of the bag?

(2) Were frozen food items and ice cream placed in an insulated bag?

(3) Were soaps, bleaches, ammonia, and odor causing merchandise kept separate from other foods?

(4) Was merchandise packed above the top of any one bag?

Yes No NA SHELVING: (Scale: Yes - No - NA)

(1) Were similar items placed together alternating small and large.